THE COTTON GIN AND OIL MILL

PRESS

FORMERLY THE COTTON GIN AND COTTON OIL PRESS

51st YEAR

AUGUST 5, 1950

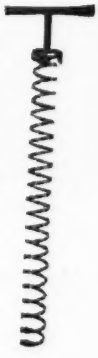
THE MAGAZINE OF THE COTTON GINNING AND OILSEED PROCESSING INDUSTRIES

Entered as second-class matter February 4, 1905, at the Post Office at Dallas, Texas, Under Act of Congress of March 3, 1897

Cottonseed Testing Equipment from SEEDBURO

This cottonseed testing set has been accepted by the Cotton Branch of the USDA for use by County A.C.A. Committees in the cottonseed loan program. This equipment is now being installed and may be inspected at the office of the committee in your county.

Cottonseed Triers



Seedburo offers two triers, the official sampler of the National Cottonseed Products Association, and a smaller model, designed for ease of carrying. The screws on both are made from ½-inch high carbon spring steel with an inside diameter of 3⅛ inches. *No. 555-A*—with a screw length of 44 inches withdraws a 5-lb. sample . . . **$20.00**. *No. 555-B*—with a screw length of 24 inches takes a 2¾-lb. sample, and is equipped with a welded, thin steel plate at the end to prevent loss of cottonseed . . . **$19.75**. Both F.O.B. Chicago.

Cottonseed Dockage Sieves

Consists of 12/64-inch round perforation sieve and solid bottom pan for removing trash from cottonseed. Made of 20-gauge aluminum, 12-inch diameter with inside depth of 1⅞ inches. Sieve, **$3.50**; bottom pan, **$2.25**, F.O.B. Chicago.

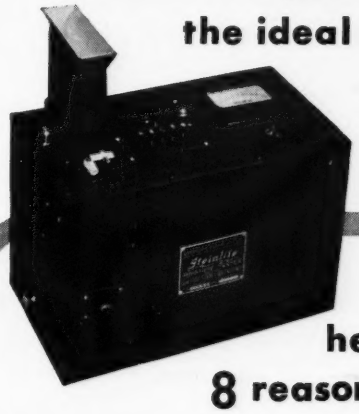
Seedburo No. 99 Gram Scale

Avoid costly errors! Weigh your samples with this *accurate* Seedburo scale! The No. 99 Scale is recommended for use in conjunction with the Steinlite Electronic Tester in determining moisture content of cottonseed. Precision built for long, reliable service . . . yet low in cost. Made of tough aluminum alloy—rust-resisting materials. High-grade self-aligning bearings, graduated beams, seamless brass scoop. Capacity, 610 grams. Rated sensitivity, 1/10 gram—actual, 1/20 gram.

Price, $28.65

Steinlite

the ideal moisture tester!



here are 8 reasons why

1. **FAST** . . . requires only ONE MINUTE to make an accurate grain or seed test. Speeds handling in peak periods.
2. **ACCURATE** . . . on moisture content up to 35%.
3. **SIMPLE** . . . no technical knowledge or previous experience required to operate efficiently.
4. **COMPACT** . . . easily portable. Operates anywhere there is an electrical outlet.
5. **DEPENDABLE** . . . calibrated against official Government oven methods. Comparable results guaranteed.
6. **VERSATILE** . . . will test wide variety of seed, grain, grain products, grain of mixed moisture content, blended grains and processed materials.
7. **ECONOMICAL** . . . pays for itself in one season of high moisture crops.
8. **GUARANTEED** . . . sold on 10-day, free trial basis.

More Steinlite Moisture Testers are used today by seedsmen, elevators, mills, co-ops, food processors, etc., than all other types combined.

If you want to speed grain or seed testing and handling, with the full, profit-protecting accuracy of the Steinlite Moisture Tester, we'll ship on ten days' free trial!

Price $330.00, F.O.B. Atchison, Kansas.

SEEDBURO

739 Converse Building, Chicago 6, Illinois

Laugh IT OFF

Traveler (to porter): "What is your average tip?"
Porter: "Five dollars, suh."
After the man handed him the five dollar tip, the porter became a little embarrassed and remarked: "I reckon I ought to tell you, suh, that so far you is the fust one what's come up to the average."

• • •

Billy: "We've got a new baby at our house."
Betty: "Where did you get him."
Billy: "We got it from Dr. Brown."
Betty: "We take from him, too."

• • •

"Jim proposed to me last night and I'm sore at him."
"What makes you so mad?"
"You ought to have heard what he proposed."

• • •

He: Your eyes fascinate me, they're so beautiful. I can see dew in them.
She: Take it easy, bub. That ain't do —that's don't.

• • •

Teacher: "Now Johnny, if I were to lay two eggs over here, and three over there, how many would there be in all?"
Johnny: "Personally, I don't think you can do it."

• • •

A tramp knocked on the door of the inn known as "George and the Dragon." The landlady opened the door and the tramp asked, "Could you spare a hungry man a bite to eat?"
"No!" replied the landlady, slamming the door in his face.
A few minutes later the tramp knocked again. The landlady came up to the door again. This time the tramp asked, "Could I have a few words with George?"

• • •

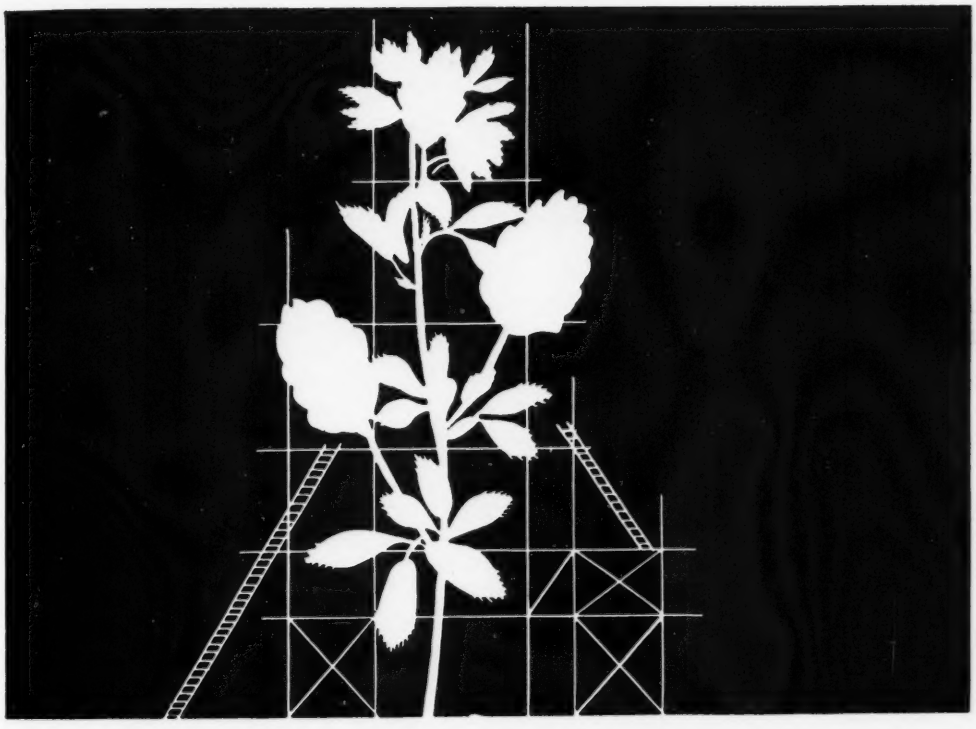
When people ignored his "No Swimming" signs, a man posted this sign: "Although Labidesthes Sicculus Abounds in This Water, It Gives No Warning of Its Presence." The swimming stopped.
Labidesthes Sicculus is the scientific name of a small fish usually called silversides.

• • •

"When I was a boy," said the gray-haired physician, who happened to be in a reminiscent mood, "I wanted to be a soldier but my parents persuaded me to stpudy medicine."
"Oh, well," rejoined the sympathetic druggist, "such is life. Many a man with wholesale aspirations has to content himself with a retail business."

• • •

A man with a suitcase chased the train to the end of the platform, but failed to catch it. As he walked slowly back, mopping his brow, an onlooker remarked, "Miss the train?"
"Oh, not much," was the reply, "You see, I never got to know it very well."



AMMONIA NITROGEN builds COVER CROPS

Grasses, clovers, and legumes—whatever the cover crop—ammonia nitrogen means rapid, early growth. By building vigorous cover, it helps hold the land down to earth, fights erosion, and cuts down the annual harvest of dust bowls.

High-nitrogen fertilizer, applied to cover crops, is an important part of the soil conservation program.

CSC produces anhydrous ammonia, the most concentrated and economical source of nitrogen, at its Sterlington, Louisiana, plant. The major part of this production is going to Gulf Coast manufacturers for conversion to high-nitrogen fertilizers.

PRODUCTS OF THE AGRICULTURAL DIVISION
Anhydrous Ammonia • Benzene Hexachloride • Choline Chloride • Condensed Distillers' Molasses Solubles • Dilan • Ethyl Formate • Metaldehyde • Niacin • Butyl Fermentation Solubles and Riboflavin Feed Ingredients

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THE MAGAZINE OF THE COTTON GINNING AND OILSEED PROCESSING INDUSTRIES

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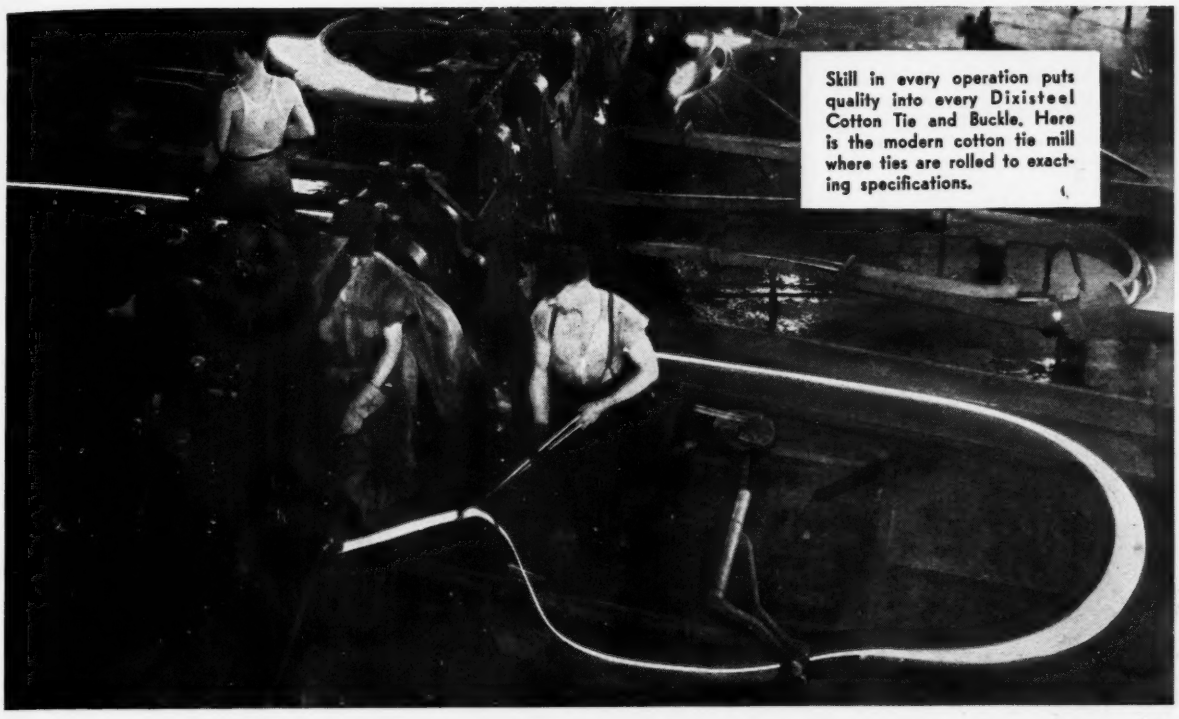
On the Cover

■ Four all-metal cottonseed bins at the double-battery Duncan Cooperative Gin at Inverness, Miss. Note tractor in the background hauling three trailers of seed cotton. Photograph made in October of last year.



Skill in every operation puts quality into every Dixisteel Cotton Tie and Buckle. Here is the modern cotton tie mill where ties are rolled to exacting specifications.

Speaking of futures...

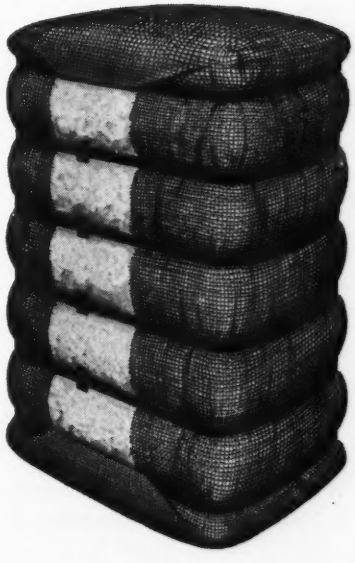
Ginners will soon be busy as bees baling up this year's cotton crop.

Long before then, however, we'll be busy as bees making DIXISTEEL Cotton Ties and Buckles for the ginners.

Year after year ginners everywhere enjoy the superiority of ties and buckles that bear the name DIXISTEEL.

They know from experience that DIXISTEEL Ties are free from razor-sharp edges that cut through gloves and fingers. They know that each tie is uniform in finish, strength, durability and quality.

Standard bundles of DIXISTEEL Ties weigh approximately 45 pounds and contain 30 ties — each 11½ feet in length, 15/16-inches wide and of approximately 19½ gauge thickness. Thirty DIXISTEEL Buckles are firmly attached to each bundle. Sixty-pound DIXISTEEL Ties are also available. They vary from 45-pound ties only in thickness. Both weights are available with or without buckles.



DIXISTEEL BUCKLES *won't slip up or down*

Developed through years of constant research and work with ginners, Dixisteel Buckles are designed to meet every requirement. They won't slip up or down. They provide a firm seating. They won't give way or cut the tie. Stamped from our own special-analysis steel, Dixisteel Buckles are made to stand the strain and pull exerted when the press is opened.

Available with Dixisteel Ties or separately in kegs or carload lots. Specify Dixisteel Buckles.

DIXISTEEL COTTON TIES AND BUCKLES

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Atlantic Steel Company

MAKERS OF DIXISTEEL SINCE 1901

ATLANTA, GEORGIA

Cotton under the
Research and Marketing Act

By DR. P. V. CARDON
Administrator, Agricultural Research Administration, USDA, Washington

YOUR CHAIRMAN has asked me to make a general statement on what we are doing about cotton and cottonseed under the Research and Marketing Act. I am most happy to do this because activities under that act have reached a point, I believe, where we can mutually benefit by discussing them.

We have made substantial progress, as I shall show, even though funds for starting work under the RMA were not available until the summer of 1947, or about three years ago. Research does not often "sugar off" in so short a time. It is essential also to realize that the RMA, important as it is, cannot be regarded as a means of quickly reaching utopia.

Besides Acts of Congress and the authorizations they provide, and besides the money made available under these authorizations, we need understanding, ideas, clarity of purpose, research competency, effective techniques, helpful administration, and time. The RMA does specify and authorize additional procedures which have helped greatly to accelerate the over-all program. I am convinced that it has made a good research program better than it was before the act was passed and it has in it the essential elements of still greater achievement.

In view of ever changing economic conditions and the widely recognized need for keeping the consumption of farm products in better alignment with production, the act very wisely calls for a greatly accelerated program of marketing and utilization research, education, and service. Several additional features of the act leave no doubt about what Congress intended: For the first time the Department was given practical authority to contract with public or private agencies to do marketing and utilization research; also, on a fund-matching basis, the Department can enter into cooperative agreements with state Departments of Agriculture and Bureaus of Markets to do marketing service types of work; not less than 20 percent of the direct-grant funds to state experiment stations under the RMA must be applied to marketing research; and as much as 25 percent of these direct-grant funds can be used for cooperative regional research in which two or more states have a common interest.

Another feature of the RMA which has not appeared in previous agricultural legislation is the provision for establishing advisory committees. In addition to the over-all Agricultural Research Policy Committee, and the Committee of Nine which is concerned with regional research, 17 commodity advisory committees and three so-called functional committees have been appointed. They meet with us at least once a year to discuss problems in their particular area of interest and make recommendations as to how these problems might be solved.

Three other important committees render continuing service, namely, the marketing committees appointed by and representing respectively the state Experiment Stations, Extension Service, and Departments of Agriculture and Bureaus of Markets. This makes a total of 24 committees in addition to a number of consultant groups.

Three years' experience with the committee system has already demonstrated that these committees are rendering essential service. We shall continue to make the fullest possible use of them. We are also asking the members of these committees, nearly all of whom make their living from the production, processing, or marketing of farm products, to concern themselves not only with RMA activities but with the Department's entire research and marketing program. We propose to utilize other committees, on a temporary or permanent basis, as the need for them becomes obvious.

One of the most significant meetings ever held in the Department of Agriculture took place last month when the chairmen of all the advisory committees met with us and members of the 11-member policy committee. Recommendations coming from that meeting have been publicly announced but some of them probably bear repeating here: Advisory committees should help the Department to maintain a proper balance between fundamental and applied research; contract work, as authorized under the RMA, should be expanded to the fullest practicable extent; extension, education, and service work should be expanded; training programs, especially by state institutions, should be encouraged so that qualified personnel will be available to conduct the expanded program contemplated by the RMA, particularly the marketing and distribution phases of it; private corporations, trade and producer groups, state and local organizations, and other groups should be encouraged to do with their own funds necessary research which is supplementary or in addition to that being done through the U.S. Department of Agriculture.

DR. P. V. CARDON

Some of these recommendations are recognized as confirmation of what is already being done but I assure you that tne fulfillment of all of them will be encouraged.

I would like to mention at this point

■ **THIS TALK by Dr. Cardon was made before the Eleventh Annual Cotton Research Congress at Dallas, Texas, July 27. His remarks about research into new and improved uses for cotton and cottonseed products will prove of interest to ginners and cottonseed crushers everywhere. A report of the proceedings of the Cotton Research Congress appears elsewhere in this issue.**

that the Cotton and Cottonseed Advisory Committee has met with us more times than any other of the advisory groups. The ninth meeting of that committee was held in Washington last March. At that time they expressed general satisfaction with current work on cotton and cottonseed and with progress that has been made so far. With the helpful advice of these cotton industry representatives, and the Department's 50 years of experience in planning and doing agricultural research, we are certain that many of the most urgent problems of the cotton industry are getting high priority attention. At the same time I recognize the urgency of still greater emphasis on some of these problems and of effort applied to needed activities not yet initiated.

This group is too familiar with the scope and implications of these problems to warrant my discussing them at length. A great deal more needs to be done about the mechanization of cotton production. Varieties of higher fiber strength and quality are needed if cotton is to compete favorably with synthetic fibers. Some of the known superior qualities of cotton have not been fully exploited. Insects still take an annual toll of about 250 million dollars. More needs to be known about the ginning and marketing of raw cotton and cottonseed. Problems entailing foreign markets for cotton are many and baffling.

Complete mechanization, from seedbed preparation through storage and ginning, is the goal of an across-the-board program in which 15 Southern states are cooperating. Individual states are carrying on certain segments of work as a part of an integrated program. Industry itself is active on many fronts and has contributed greatly to cotton mechanization. An indication of progress is the fact that approximately 3,000 spindle-type pickers were available for last year's harvest as compared with only a few hundred shortly after the war. I am informed that the number of mechanical pickers available in Arkansas and California doubled from 1948 to 1949.

But improved mechanical harvesters and wide adoption of them is only a small part of the story. The Arizona station is doing further work on the planting of acid-delinted seed. Studies aimed at improved planting methods and the effects of plant spacing on yield and machine-picker performance have been undertaken in California. Where to place fertilizer and the use of machines for precision placement of it are being investigated in Mississippi. Alabama is trying to develop better equipment and methods for applying anhydrous ammonia.

A comparative study of mechanical, flame, and chemical weed control in cotton is under way in Alabama, Arizona, Arkansas, California, Georgia, and Louisiana; New Mexico has tackled the weed control problem in irrigated cotton.

As these and other studies progress, a new pattern for mechanized cotton production will evolve. Cotton producers will, of course, make the final decision as to whether new practices and machines will enable them to produce better cotton at lower cost.

As a further basis for this decision, several of the state experiment stations, in cooperation with the Bureau of Agricultural Economics, have brought together facts pertinent to the economic feasibility of mechanized operations.

Studies in the Mississippi Delta, for example, show that 155 man hours are required to produce a bale of cotton with one-row mule-drawn equipment and hand chopping and picking. The use of tractor equipment and a mechanical harvester reduced the man-hours to 45 and by also using the rotary hoe and flame cultivator, the time was further reduced to 30 hours. If cotton production were completely mechanized and all hand work eliminated, the study indicates that a bale of cotton could be produced in the Delta with only 10 man hours. A number of studies are under way to determine the degree to which it pays farmers with varying size operations to substitute more mechanized operations for those currently used.

Work being done by the Bureau of Agricultural Economics in cooperation with the Texas station shows that the use of rotary hoes can reduce hoeing labor by 61 percent, representing a saving of about $6.50 an acre. In the High Plains area, hoeing costs were reduced nearly 17 percent where rotary hoes were used in conjunction with the lister-cultivator. The work in Texas also showed that the mechanical stripper is more economical than hand snapping after frost, but until a satisfactory defoliant is developed, stripping before frost does not pay.

Another of these economic studies in the Mississippi Delta indicates that cotton farmers there can reduce production costs by using anhydrous ammonia as a nitrogen fertilizer. Benefits show up more on the larger farms, however, because they can make more efficient use

of the tanks and heavy equipment that is needed for applying this new type of nitrogenous fertilizer. Under 1949 conditions a farmer fertilizing 400 acres of crops could reduce his fertilizer costs at least $400 by using fertilizer in this form instead of the nitrogens normally used. The idea seems to be taking hold. It was used on about 200,000 acres in the Delta area in 1947 as compared with an estimated million acres in 1949. And its use is spreading to other states.

Whether machine harvesting is less costly than hand picking depends on wage rates for hand pickers, the extent to which farmers can make full use of the mechanical harvesters, and the amount of grade and field loss. Preliminary studies in Mississippi and North Carolina show that when the mechanical pickers are used to harvest around 100 or so bales per year it pays to use them instead of having cotton hand picked if the cost of the latter is $3 or more per 100 pounds of seed cotton. As many of you here in Texas and Oklahoma know, studies show that under conditions of the past few years, many farmers in the High Plains have found the use of mechanical strippers profitable.

Research by Department engineers and entomologists, cooperating with the Mississippi station, indicates the possibility of greater economy and efficiency in spraying cotton with insecticides. They have found that concentrated solutions of some of the new organic insecticides and better equipment for applying them might well eliminate the more costly and time-consuming methods of dusting cotton for insect control. Although this work is still experimental, it has prompted some cotton farmers to try to combine three operations—cultivation, flaming for weed control, and spraying for insect control—all in one tractor operation. When research and farmer-initiative team up this way, the problem usually yields.

New chemicals known as systemic poisons are being tested to determine their effectiveness not only for killing harmful insects but the effect they might have on such beneficial insects as bees, parasites, and predators. Plants treated with these chemicals absorb and distribute them to all parts of the plant through the sap. Four new phosphorus compounds have been found which, when taken up by cotton plants, kill aphids and mites. The treatment of cotton seed with a minute quantity of these materials makes the young cotton plants poisonous to insects for several weeks. These preliminary tests, not yet conclusive, point to inviting possibilities.

The introduction of foreign plant materials has been the basis of many desirable characteristics in U.S.-grown cotton. But the need for further improvement in this field is continuous. Since the RMA was passed 250 collections of cotton breeding stock have been brought in, mostly from Guatemala and Mexico. Preliminary steps toward evaluating their potential value to the American cotton industry have been taken.

Improved methods and equipment for ginning cotton have become more imperative with the upward trend in mechanization and the need to improve the quality of cotton to meet competition. In December of last year the new U.S. Cotton Ginning Branch Laboratory was dedicated at State College, N. M. Its main purpose is to meet the special ginning requirements of cotton grown under irrigation in California, New Mexico, and other southwestern states. The ginning laboratory at Stoneville, Miss., as most of you know, has been concerned largely with problems of cotton grown under the warm, humid conditions of the Mississippi Delta and the Central and Eastern states generally.

The new branch laboratory at State College, N. M., was built and equipped with RMA funds, but as at the Stoneville laboratory, the research done there will be financed with funds from any appropriate source. Specific research being undertaken at the new laboratory as rapidly as possible is to reduce the damage from flash fires caused by static electricity; improve methods or equipment for ginning extremely dry cotton; develop more efficient roller-type gins for handling long-staple cotton; and to develop better methods for pressing dry lint cotton to ordinary gin bale density. Bale density studies by the Arizona Experiment Station show that Arizona cotton growers can make substantial savings annually in compressing costs by replacing low density gin presses with standard density equipment. This practice would also result in a better looking bale and would reduce transportation and handling costs.

The search for new and wider uses of cotton and cottonseed has been broadened and intensified under the Research and Marketing Act. Virtually all of this work is being done by or is under the supervision of the Department's Southern Regional Research Laboratory at New Orleans. At your tenth annual congress here last year, Walter Scott, who was director of that laboratory until he joined our Washington staff about seven months ago, presented a paper outlining the progress of cotton utiliza-

tion research at the Southern laboratory. It would serve little purpose, therefore, for me to cover that ground again, except to bring you up to date on some recent accomplishments. The scope of the work is suggested by the fact that there are at this time 13 RMA sub-projects aimed at obtaining more fundamental knowledge about the characteristics of cotton fiber. Fifteen projects have the over-all goal of developing new and improved products from cotton fiber through processing and chemical treatment, and seven aim to find new and improved products from cottonseed.

A chemical treatment has been developed that markedly reduces the susceptibility of cotton fabrics to soiling and makes cotton goods to which the treatment has been applied easier to launder. The chemical involved is carboxymethyl cellulose, or CMC, for short. Several chemical companies are making plans to package and market this compound in consumer-sized packages for general household use. The work was conducted under contract with the Institute of Textile Technology at Charlottesville, Va.

A new method for determining precisely the proportion of immature cotton in a dyed sample of the fiber has been developed which shows high promise. The sample, containing a mixture of red and green dyed fibers, is ground so that the two colors are thoroughly blended into a uniform shade. Then, by measuring photometrically the light reflected from the ground sample, the quantity of immature cotton can be closely determined.

Last year Dr. Scott described a repellent that had been developed for keeping insects out of cotton bags. Further work has had to be done on this project, but I am glad to report that the textile bagging industry and the Army Quartermaster Corps have taken steps to evaluate this newly developed insect repellent process on a commercial scale. It should help improve the competitive position of cotton in the food packaging business.

Considerable new work has been undertaken by the Southern laboratory and by other department agencies to develop and evaluate new and improved products from cottonseed. An example of progress is an improved screw-press method of processing cottonseed which permits the meal to be fed to hogs and chickens in quantities up to 40 percent of the diet. Ordinarily, cottonseed has been limited to 10 percent or less of the total diet. The new method was developed cooperatively by the BAIC and the cottonseed oil industry. Actual feeding tests were conducted at Beltsville, Md., by the Bureau of Animal Industry. Further feeding experiments are now under way at the Texas Agricultural Experiment Station and at several other Southern experiment stations.

I could discuss a host of other projects on which progress has been made during the past year but the work has not yet reached a point where it has practical application. As results materialize, we not only want every interested segment of the cotton industry to know about them, but we want your cooperation and advice in getting them effectively applied.

In the periodic appraisals of cotton utilization research under the RMA by the Cotton Advisory Committee, it has been interesting to note from their recommendations the changes in emphasis of one project over another from time to time. With the thought that it might serve the best interests of the whole cotton utilization program of the Southern laboratory, Dr. G. E. Hilbert, chief of the Bureau of Agricultural and Industrial Chemistry, has arranged with the National Cotton Council to have Leonard Smith and George Buck of that organization analyze the entire cotton utilization research program at the Southern laboratory. They have agreed to do this in the near future. Dr. Hilbert has asked them for recommendations on the possible reorientation of the program, the proper balance between applied and fundamental research, and on any changes that might help to strengthen working relationships with industry. We hope that this additional collaboration with representatives of the cotton industry can keep the program geared to present-day realities.

The contracting provisions of the RMA have permitted a new measure of industry cooperation through the use of privately owned research facilities. Approximately 150 contracts have now been let, some 25 of which are directed at cotton and cottonseed problems.

You probably saw the announcement a short time ago about a new device and

process that has been developed for removing trash and other foreign matter from seed cotton. The research was done under contract with the Batelle Memorial Institute at Columbus, Ohio, and is considered a significant step toward solving the trash removal problem, particularly in connection with mechanically harvested cotton. In compliance with the contract, the inventor, Dr. David G. Black of the institute staff, has assigned his patent rights to the Department where application for a patent has been made. When engineering principles involved in this new device have been further verified by the contractor, the Stoneville ginning laboratory will have responsibility for translating the new principles into practical use.

A contract is in effect with the Fabric Research Laboratories at Boston to learn more about factors that influence the draping properties of cotton fabrics; the Lowell Textile Institute at Lowell, Mass., is working under contract to improve cotton warp yarns in the manufacture of carpets; the Harris Research Laboratories of Washington, D. C., are attempting to improve the luster of cotton textiles; the removal of oil from cottonseed by the solvent process and subsequent separation of linters, hulls, and meal has been the subject of a contract with the Texas Engineering Experiment Station at College Station. The Texas station also has a new contract under which it will seek to improve the process for continuous screw pressing of cottonseed.

Under provisions of the RMA which permit cooperative working arrangements with state Departments of Agriculture, 29 states and two territories are conducting marketing service programs.

Experience in North Carolina under one of these cooperative agreements might be used as one example of the type of work being done. During the 1948 season the state Department of Agriculture employed specialists to inspect ginning equipment and operations and to assist ginners in making improvements. As a result of this service, approximately 150 gins made major improvements, ranging from installation of conditioning and cleaning elements to the erection of completely modern outfits. The percentage of rough ginned cotton in 1948 was less than five percent compared with nearly 20 percent in 1947. This reduction in the so-called "rough prep" cotton is estimated to have increased the value of North Carolina's 1948 crop by $667,000.

In an effort to expand market outlets for cotton, information has been collected concerning the quality and quantity of raw cotton required in the manufacture of the principal cotton products representing market outlets for approximately three million bales. The report on this work, which has been widely distributed to the trade, includes information on fiber length and uniformity, tensile strength, fineness, maturity, and color value. It also shows the quality of yarns and fabrics that are produced from the various kinds of cotton being used by cooperating mills in the manufacture of each product. With this information, mills requiring cotton of a particular quality are better able to locate sources of supply. On the other hand, sellers of cotton are in a better position to locate potential markets for cotton of specific qualities.

The federal and state extension services have authority and responsibility to demonstrate new and improved methods and facilities for marketing farm products. Since experience has shown that identification and marketing of cotton according to variety, and the area and year in which it is grown are important factors in determining the quality and spinning value of cotton for different uses, several states are developing area marketing programs for properly identifying pure varieties of cotton. Pilot type demonstrations are held to show in actual practice how cotton can thus be identified as a regular marketing practice. Last year 110,000 bales of pure variety cotton were identified in New Mexico and about 13,000 bales in Georgia. Three other states, Mississippi, Missouri, and Oklahoma, are expected to demonstrate the merits of variety indentification this year.

Consumer preference studies have been made for a wide range of commodities to determine just what consumers want as to quality, services, and many other characteristics of the products they buy. The results are helping farmers, processors, wholesalers, retailers, and others in the marketing system to do a better job of providing the goods and services consumers want. The findings of a survey to determine men's preferences for the kind of fiber they prefer in certain items of clothing have been widely, and I hope effectively, used in promotional materials issued by the National Cotton Council. Surveys on cotton as used by the automobile industry and in the manufacture of awnings are now under way.

Studies are showing that huge savings

(Continued on Page 35)

Facing cotton's production problems

Realistically

JAMES HAND, JR. "The pressure is certainly heavy upon us to produce efficiently and profitably on every acre . . ."

By JAMES HAND, JR.

IT IS MY PURPOSE to consider with you the problems that we face in cotton production. My observations are based on experiences in commercial cotton farming over a period of 18 recent years.

You do not need me to tell you that the cotton farmer's future prosperity is dependent upon his cost of production and the prices which he will receive. It is not within my province to analyze all or any of the factors that will have an effect on price, not even including the factor of prices of competitive growths and materials which would require cotton being sold at a moving price. The practical farmer knows that he is going to have to meet this competition, but he cannot go beyond the limits of profitable production. As soon as he faces a loss, he will soon be out of production, and supply will make its adjustment to the old law of demand. However, it has long been thought that by improved methods and techniques the farmer could do many things to reduce the high number of man hours that have been necessary to produce the crop. If he can utilize machines to accomplish this goal, and thereby reduce the cost, it will keep cotton in either a more competitive or more profitable position, and perhaps both. It is the purpose of this meeting to determine just how far mechanical production has progressed and what hopes there are for future progress.

Aside from the cost of production and perhaps as a corollary to it, the cotton farmer has to deal with a matter of acreage control in order to get the benefits of support prices. Since he must operate under a system of cotton acreage allotments, he must give consideration to the crops grown on the non-cotton acres, so he is no longer simply a cotton producer. As a matter of fact, he never has been. Belt-wide, we are now thinking in terms of cotton-livestock farms, cotton - dairy farms, cotton - cash - grain farms, and so on. The cotton farmer is, therefore, a producer of other crops, and the success of his operation will depend upon the combined profitableness of all of his enterprises.

In thinking of cotton farmers, we must consider the smaller size family-operated unit as well as the larger commercial units. Those units that are operated only as a means of supplementing other income are not a consideration here. We also need to think of farms that are already mechanized to the limit of available practical machines, those that are in transition, and those which have to make a beginning toward mechanization, partial or complete.

I think that I can best make a contribution to this discussion by relating the efforts that we have made in our own farming operations. These experiences will serve to illustrate conditions and possibilities on large farms in the alluvial areas of the Cotton Belt. Our farming is in the Mississippi Delta and on properties that were in bad cultural condition at the time we took them over. They were practically devoid of housing or any other building improvements, and the fields were badly infested with grasses and weeds. Inasmuch as we were limited very much financially, we could not hope to do the necessary rebuilding to operate these properties by the tenant system. The cost of doing this, plus competing for the limited supply of labor, plus the purchase of mules, equipment, and seed would have prohibited our obtaining and operating these properties at all. However, we were able to make the down payments on some secondhand tractors and equipment and to make enough of the houses livable to accommodate the labor necessary to operate the machines. It so happened that the amount of labor required to operate the land on a mechanized basis was one farmer for about every 100 acres of cultivated land. Our properties are operated by hired management which costs several dollars per acre in case and appurtenances, but operating figures do not include interest on debt or investment. Depreciation on improvements and equipment is included, as are all other expenses that are deductible from income taxes.

From the experiences that we had had in the farm equipment business, we knew that we could prepare the land, plant, and cultivate the crops with the labor and machines available to us. We did know that if we planted these crops we would have a serious problem in getting it hoed. We, therefore, determined to check plant cotton with four-row check planters, which we did, and obtained an entirely satisfactory check. The result was that by cultivating both ways we were able to keep the crops cultivated sufficiently clean so that a much smaller amount of hoe labor was required. We found that families of the machine operators were sufficient to hoe this check cotton and that only about one and one-half man days per acre were required to do the hoeing through the entire season. Since this program was undertaken a great many years before mechanical harvesters were made available, it was necessary to import labor with which to do the harvesting. We were able to obtain labor from the vegetable sections of the state and from nearby towns and cities. This enabled us to operate under a system of partial mechanization, and, as you can easily see, we were still obligated to do a certain amount of hoeing and do all of the harvesting manually.

Now that mechanical harvesters have become available, we have undertaken to utilize them to the extent that about 75 percent of our cotton production will be harvested by machinery during 1950. It would likely be feasible to harvest it entirely by machinery, but we find ourselves making a concession to workers who are a part of the families of machine operators and who desire to pick

(Continued on Page 20)

■ **THE AUTHOR, who is one of the Mississippi Delta's most successful plantation operators, delivered the accompanying address at the Cotton Mechanization Conference held at Greenville, Miss., July 15. We believe his experiences with modern methods of cotton production will be of interest to our readers in all Cotton States.—ED.**

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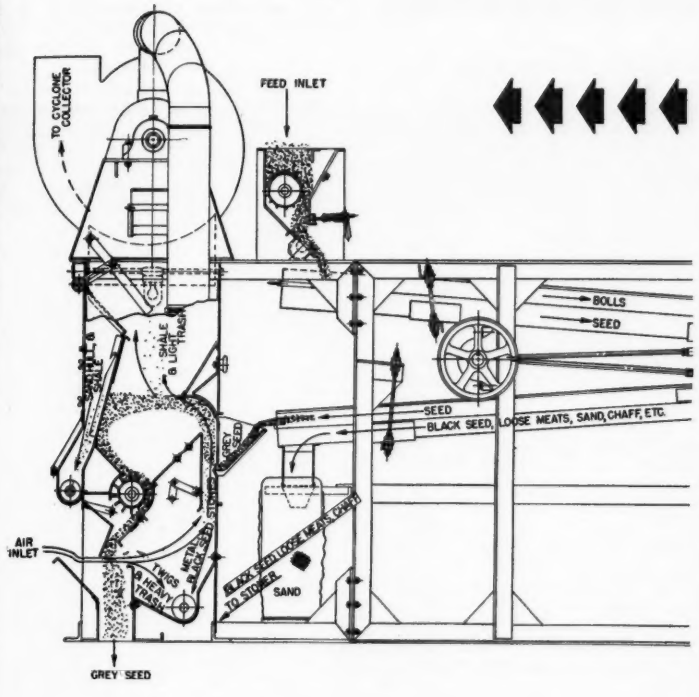

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People in The Press

• **Dr. P. V. Cardon,** ARA administrator, discusses cotton research under RMA at Cotton Research Congress in Dallas. Page 9.

• **H. E. Covington** heads Mississippi Cottonseed Products Co. as **W. D. Lowe** is moved up to board chairman. Other new titles: **J. B. Perry, Jr.,** vice-president and general manager; **John R. Mason,** secretary-treasurer. **George E. Covington** continues as vice-president and **Mrs. M. Russell** as assistant secretary-treasurer. Page 28.

• Mechanized cotton production from grower's standpoint is discussed at Belt-wide Mechanization Conference at Greenville, Miss., by **James Hand, Jr.,** plantation operator. Page 16.

• **W. H. Harper,** Mid-South Cotton Growers, and **Harrold B. Jones** and **A. L. Jerdan,** Tennessee Extension Service, supervise Tennessee Cotton Classing School at which speakers include **A. L. Smith,** Board of Supervising Examiners for Cotton Classers; **N. I. Hancock,** Experiment Station; **R. P. Mullett, E. C. McReynolds** and Jones, Extension Service; **W. Kemper Bruton,** Cotton Council; and **Lonnie Bennett,** Federal Compress Co. Page 24.

• New president of Mississippi Farm Bureau Federation is **Boswell Stevens,** Cotton Council director, Macon, Miss. Page 39.

• **Dr. C. C. Murray** is appointed dean of University of Georgia's College of Agriculture and **Dr. O. C. Aderhold** is made head of the university. Page 35.

• Cotton Research Congress speakers pictured in this issue include: **Burris C. Jackson,** Congress chairman; **E. C. White,** assistant to Secretary of Agriculture; **Gibb Gilchrist,** program committee head; **Dr. A. B. Cox,** panel leader; **A. F. Leesch,** Texas State Grange; **Harold A. Young,** Cotton Council head; **Dr. Watrous Irons,** Dallas Federal Reserve Bank; **A. L. Ward,** night session chairman; **James A. Kime,** in charge of part of night program; **L. P. Gabbard,** Texas A. & M. (not a speaker); **Noel Sargent,** NAM secretary; **L. T. Murray,** general arrangements chairman (not a speaker); **J. L. Rhodes, A. F. of L.; W. E. Hamilton,** American Farm Bureau Federation. Page 40.

• **Dr. N. C. Hamner,** Dallas, is at home ill, but his condition is improving. Page 26.

• Other Cotton Congress speakers not pictured include: **Dr. Louis E. Hawkins** Oklahoma Experiment Station; **Dr. Earl E. Berkley,** Anderson, Clayton; **Dr. D. M. Wiggins,** Texas Tech; **Dr. Claudius T. Murchison,** American Cotton Manufacturers Institute; **Read P. Dunn, Jr.,** Cotton Council; **Robert Oliver,** CIO. Page 41.

• **David T. Killough,** on leave from Texas A. & M. to help ECA help Turkey build stronger cotton economy, is subject of special report from Ankara. Page 44.

• USDA announces new cottonseed loader developed by **Gerald N. Franks,** Stoneville. Page 46.

• **Dr. I. O. Schaub** is honored for long Extension Service work by North Carolina farm families. Page 46.

• Continuation of poisoning for cotton insects is urged by **Claude L. Welch** in Cotton Council's insect control campaign. Page 23.

• **Christie Benet,** NCPA general counsel, is featured in *The State Magazine,* South Carolina newspaper feature section. Page 22.

• Changes in management of Kingsbury Cotton Oil Co. announced by President **Richard W. Fewel** include election of **James W. Moller** as vice-president and general manager and **Milo Erwin** as assistant general manager. **John H. Dinkins** is vice-president and secretary-treasurer. Page 26.

• **Dr. Leonard Smith** and **George Buck** of the National Cotton Council will work with USDA-BAIC in planning cotton utilization research program. Page 22.

• Those in charge of district meetings of Texas Cotton Ginners' Association, announced by Executive Vice-President **Jay C. Stilley,** are **S. J. Vaughan, Jr.,** District 5; **W. C. Smith,** District 15 (East); **Rex Sullivan,** District 15 (West); **George B. Hall,** District 23 and New Mexico ginners; **W. O. Fortenberry,** Districts 16-20. Page 22.

• Discussion leaders during the annual Tennessee ginners' tour at Stoneville, Miss., include **Dr. D. Gray Miley** and **Dr. D. W. Dunham,** Delta Branch Experiment Station; **Charles Merkel,** U.S. Cotton Ginning Laboratory; and **Francis L. Gerdes,** U.S. Fiber Laboratory. Page 18.

• **Robert C. Jackson,** American Cotton Manufacturers Institute head, recuperates from an appendectomy. Page 22.

• It's triplets at the **Roy Newsomes,** Southland Cotton Oil Co., Corsicana, Texas. Page 26.

• **D. D. Day,** The Murray Co., discusses gin manufacturer-ginner relationship at Delta ginners short course. Other speakers: **Charles M. Merkel,** U.S. Cotton Ginning Laboratory; **Vernon Moore** and **John Ross,** U.S. Fiber Laboratory; **Charles Oglesbee,** U.S. Extension Service; **Tom Johnson,** Mississippi Extension Service; and **Charles A. Bennett,** U.S. ginning investigations. Page 31.

Acreage Bill Divides South and West

The new cotton acreage allotment bill approved July 31 by the House struck fire in Western producing areas and was sent to a Senate agriculture committee that is said to contain no strong supporters of the measure.

Fred Bailey of this magazine's Washington Bureau reports that the bill is given no better than a 50-50 chance of Senate adoption. Senate Agriculture Committee Chairman Elmer Thomas said the committee will hold hearings soon, but did not set a date.

"Western cotton states bloc led by Senator Anderson of New Mexico," Bailey wires, "is set to strongly oppose changes which they say would work hardship on Western states which have increased acreage." The bill was put across in the House by congressmen from the Old South side of the Belt.

"As amended by the House," Bailey reports, "the bill permits state committees to withhold one percent for distribution to new farms and legalizes quota review boards and procedures set up temporarily in the 1949 law. It also provides that when national acreage is increased above 21 million acres, the present 45 percent of cropland limitation on any farm be increased by same percentage as national allotment above the 21 million acres. It likewise makes 1951 and 1952 quota proclamations mandatory."

Tennessee Ginners Make Annual Stoneville Tour

Almost fifty Tennessee ginners and others interested in ginning made the annual Tennessee ginners tour to the U.S. Cotton Ginning Laboratory, U. S. Fiber Laboratory and Delta Branch Experiment Station at Stoneville, Miss., July 19-21.

The tour started at the experiment station the afternoon of July 19, where Dr. D. Gray Miley, superintendent of the station, described the work being done there. Dr. D. W. Dunham discussed cotton insects and insect control. The ginners then toured the station and inspected the machinery being used there.

July 20 the ginners visited the USDA ginning laboratory, where Charles Merkel and other members of the laboratory staff spoke on various phases of cotton ginning and discussed effectiveness of the gin equipment used in the laboratory. A bale of cotton was ginned for the visitors.

After a barbecued chicken luncheon given by the Stoneville Pedigreed Seed Co., the Tennessee ginners toured the firm's farm and visited nearby cotton gins with the latest types of equipment. They were then guests of Delta & Pine Land Co. at a cocktail party.

The group toured the U.S. Fiber Laboratory on the final morning, where Francis L. Gerdes and other staff members discussed their work.

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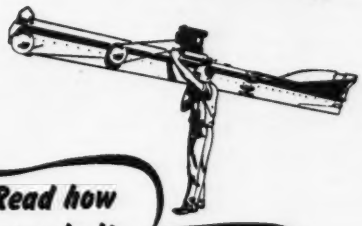

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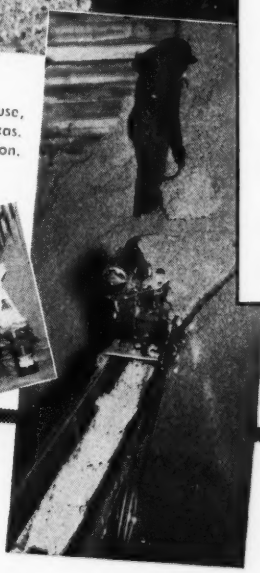

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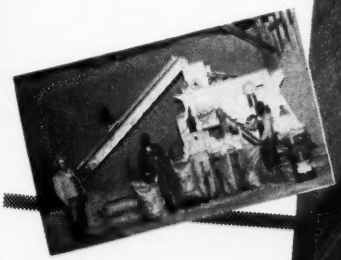

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Cotton's Production Problems

(Continued from Page 16)

as soon as the cotton begins to open. This is the same labor upon whom we depend to do the amount of hoeing we find necessary in check cotton. At the present time, we are not planting with the check planters, but are drill planting and cross cultivating to a check where stands of young cotton are sufficient. We are also doing some hill drop planting in order to make comparisons as to picking characteristics in check planted cotton and in hill dropped cotton. This year we also found that in some cotton planted in the drill for the purpose of cross cultivating to a check, packing rains and cut worms depleted the stand to the extent that we preferred to run the risk of chopping and hoeing in the drill to plowing up and replanting. This is something that can be accomplished under conditions of an ample labor supply during this season. Looking to the future, when this labor leaves the nearby urban communities or becomes permanently employed in new industries, farm labor will become smaller in supply and the risks attendant upon the hoeing operation will become more hazardous.

Cross plowing is now done to check the hills and also for block thinning. The cross plowing for check is done on a standard row-with basis, which is usually 40-inch centers or whatever the standard row width is. This is to do the cross plowing with a minimum of cultivator resetting. A common practice is to lay off four rows at a time with the use of planter markers and to do the blocking with disk hiller set about 10 inches apart. In our own case, no thinning of the hills is done by hoes, as tests have shown that this is not necessary for maximum yields. The blocking is coming into more general use and the hills are usually four inches to six inches long and 16 inches to 30 inches on centers. This gives a stand comparable to hill dropping and allows for another cultivation or two crossways for grass control. There is no increased yield above the 40-inch checking, but some early tests at Stoneville indicate that in machine picking there is less slugging of the picker and less field loss of cotton. Some of our best farmers, however, find that neither of these is objectionable and prefer the 40-inch hills for two reasons: It is easy to turn crossways with the standard cultivator, and also under some adverse conditions of grass and weed infestation it is easier to keep the crop clean or free from the hazard of serious loss in yield, which factor over a period of years might compensate for the greater field loss in machine picking.

We know that until such time as grasses and weeds can be definitely controlled by pre- or post-emergence treatment with chemicals and by flaming, or some combination of these, that it will be necessary to do some hand hoeing. Until that time, it seems that cross cultivation and flaming will reduce the amount of hoeing needed and will extend the period of hoeing without serious handicap to the young cotton, because the cultivation both ways will maintain vigorous growth and keep the infestation of grasses and weeds sufficiently under control to allow more time for ultimate cleaning of the crop. During this time it is very evident that a good quality of both hoeing and cultivating have a very beneficial effect in obtaining cleanliness and reducing costs. Quality not only means getting all of the grass with the hoe for each time over, and selection of types adjustment and speed of sweeps, but it also is a matter of timing the hoeing and cultivation operation. We have found that the best of our managers save several dollars an acre under the managers who have the higher costs.

In anticipation of this problem, we are presently spraying our cotton at the time of the first cultivation and again within seven to 10 days. We are hoping that this will kill thrips and hasten the development of the young plants so that the interval between emergence and flame cultivating will be reduced and the hazard of grass and weed infestation be reduced in the same proportion. It is our intention to continue to use flame cultivation until a better treatment, such as chemicals perhaps, has been proven. It is perfectly evident that there is a period of hazard when a bad spell of weather could put drilled or hill dropped cotton into such a bad condition of grass and weed infestation that the need for hand hoeing would be desperate. However, we have found that the check planted cotton can be kept fairly clean by cultivating both directions.

We are now using the newer method of planting by shaving off the tops of beds with a cultivator mounted on the front of the tractor and the planter with runner wings mounted on the back. This accomplishes three things: It leaves the bed undisturbed until planting time so that the soil moisture is not lost through manipulation, the infested top soil is

(Continued on Page 36)

Council-Laboratory to Cooperate on Research

Dr. Leonard Smith and George Buck of the National Cotton Council of America have been appointed collaborators of USDA's Bureau of Agricultural and Industrial Chemistry to assist in planning a more effective research program on the utilization of cotton, C. F. Speh, acting chief of the bureau, has announced.

Investigations to develop new and more efficient uses for cotton are conducted at the bureau's Southern Regional Research Laboratory in New Orleans, which works very closely with the cotton textile industry. A number of leading textile men are already serving as collaborators on specific lines of work and have made substantial contributions to the planning and execution of the laboratory's research during the past 10 years.

The appointment of the Cotton Council collaborators to advise on the over-all cotton utilization research program is intended to strengthen working relations of the laboratory with the entire cotton industry, Speh said. The willingness of officials of the Council to serve is indicative, he pointed out, of the growing interest in chemistry as a means of improving cotton's advantages in the now highly competitive fiber market.

A three-way program of chemurgic research on cotton is under way at the New Orleans laboratory. Fundamental investigations provide new basic information about the fiber itself. This information is applied in spinning and weaving studies conducted in the laboratory's experimental textile mill and in pilot-plant studies of chemical processing. All findings are made available to the textile industry for commercial application.

Buck and Dr. Smith will evaluate these investigations in the light of their experience with the Cotton Council and their knowledge of industrial needs. They will visit the Southern Regional Research Laboratory for this purpose within the next two or three months.

Dates of Texas Ginners District Meetings

Jay C. Stilley of Dallas, executive vice-president of the Texas Cotton Ginners' Association, reports that the 1950 district meetings of the Association have been better attended than ever before.

Meetings held the week of July 17-22 included Waco, with 120 present; Austin with 135; and Brenham with 110.

District 3 met at Fort Worth July 24; Districts 21-22 at Abilene July 26; and District 8 at Temple Aug 3.

District 5 will meet at Hillsboro Aug. 14, 7 to 10 p.m., at the Hillsboro Country Club. S. J. Vaughan, Jr., Hill County Cotton Oil Co., is in charge.

District 15 (East) at Holt Hotel, Wichita Falls, Aug. 15, 10 a.m. to 2 p.m. W. C. Smith, Wichita Falls Cotton Oil Co., in charge.

District 15 (West) at Quanah Country Club, Quanah, Aug. 17, 10 a.m. to 2 p.m. Rex Sullivan, Quanah Cotton Oil Co., in charge.

District 23 and New Mexico ginners at Hilton Hotel, El Paso, Aug. 21, 10 a.m. to 2 p.m. George B. Hall, Western Cottonoil Co., in charge.

Districts 16 through 20 at Lubbock Hotel, Lubbock, Sept. 2, 10 a.m. to 3 p.m. W. O. Fortenberry, Lubbock, president of the Texas association, in charge.

South Carolina Magazine Honors Christie Benet

Christie Benet, Columbia, S. C., general counsel for the National Cottonseed Products Association, is pictured on the cover of and featured in the lead story in the July 9 issue of *The State Magazine*, Sunday feature section of South Carolina's largest newspaper.

Titled "Christie Benet . . . A Champion of his State," the article is illustrated with pictures of Senator Benet as a five-year-old in Highland dress, All-Southern tackle at the University of Virginia, U.S. senator in 1918 and as he appears today. Some of his many civic, religious and educational activities are cited in the article.

Bob Jackson Doing Fine Following an Operation

His many friends in the cotton industry will be glad to learn that Robert C. Jackson is back at his desk at the American Cotton Manufacturers Institute in Charlotte, N. C., following an operation for appendicitis in Mississippi the middle of July. Jackson appeared on the program of the Beltwide Mechanization Conference at Greenville, Miss., July 14 and suffered an attack the next day. He is executive vice-president of the Institute and formerly was Washington representative for the National Cotton Council.

• Of all worry-and-time-saving devices we think the practice of answering letters on the day of receipt is the best.

Welch Urges Farmers to Continue Poisoning

"With cotton acreage greatly reduced this season, farmers just can't afford to let the boll weevil claim any part of their crop," Claude L. Welch, director of the National Cotton Council's division of production and marketing, emphasizes in urging a concentrated insect control effort during the next few weeks.

"Continue poisoning wherever necessary," Mr. Welch stresses, quoting a USDA report pointing out that late July and August is the most important period for boll weevil control. The report explains that no matter how abundant weevils may be they can be checked by the proper use of insecticides.

The Cotton Council staff member says that some areas not heavily infested with weevils early in the season may be expected to become so during the late migration period, making application of poisons a necessity.

Although local shortages of insecticides have been reported in some areas, the supply of poison generally appears adequate. Farmers are urged to place orders as far in advance as possible.

Reports received by the Council note that insecticides have been manufactured and distributed in the cotton growing states in larger quantities than ever before and that, with only two-thirds as many acres of cotton to protect and much larger quantities of poisons available, it would seem that the insecticide situation should not be too serious.

In many areas where checks have been made of unpoisoned cotton fields more than half the squares have been punctured. In nearly all cases where insecticides have been applied, punctured squares averaged less than 15 percent.

New York Exchange Has New Margin Rates

The New York Cotton Exchange last week announced new margin rates, effective July 27. They represent an increase ranging upward from $5 a bale over the previous requirements. They are as follows: $10 per bale on transactions entered into, up to 33.00 cents per pound; $20 per bale from 33.01 cents to 36.00 cents per pound; $30 per bale from 36.01 cents to 39.00 cents per pound; $40 per bale from 39.01 cents to 42.00 cents per pound and an increase of $5 per bale for each one cent per pound increase in prices over 42.00 cents per pound.

Mexican Labor to Be More Plentiful This Year

All the Mexican farm laborers needed on Southern farms will be available this year under an agreement announced by the U.S. and Mexico last week.

Liberalized regulations covering importation of Mexican labor were made public by the Immigration Service. Under the new agreement farm workers will be admitted temporarily as they are needed, with farmers being permitted to recruit their labor force at designated border ports of entry.

A sliding scale of bonds which must be deposited to guarantee the return of the Mexican workers also was agreed upon. Bonds of $50 each will be required for the first 10 laborers recruited by a farmer or an association, $15 for each of the next 490 and $10 for each worker above 500.

"Wetbacks," Mexicans who cross the border illegally, will be permitted to legalize their entry by returning to the ports of entry where they can be recruited. The Immigration Service said that it caught 500,000 workers who entered this country illegally last year.

Georgia Farmers Urged to Control Cotton Insects

Georgia's 1950 cotton crop is going to be much smaller than in the past several years, according to the July cotton acreage report, and this makes it desirable to produce as large a crop this year as is practical, E. C. Westbrook, Extension Service cotton specialist, says.

"The present war situation makes it desirable for farmers to continue to put up a good fight against the boll weevil and bollworm," Westbrook said this week. "Don't stop poisoning too soon," he warned. "If farmers do this they may lose a considerable part of the gains that have been made up to now by poisoning."

The cotton specialist pointed out that considerable quantities of poisons are being shipped out of the state, and he urged farmers to obtain as soon as practical the amounts of poison they will need during the next 30 days.

Westbrook said Georgia cotton growers are doing the best job in history of poisoning boll weevils and other cotton insects.

Council Prepares a Defoliation Guide

• Booklet is first general summary for chemical defoliation—describes dusts and sprays available; recommendations for application.

A general guide for chemical defoliation of cotton in the various areas of the Cotton Belt, prepared by federal, state and commercial defoliation workers, has been published by the National Cotton Council. This is the first time such a summary has been available.

Defoliation is a process wherein chemicals are applied to the cotton plant to cause it to shed its leaves. This makes harvesting easier, particularly when mechanical pickers or strippers are used. It also is important in late season insect control and in other phases of cotton production.

Listed in the guide are only those chemicals which have been tested in regional defoliation experiments. All have been found to defoliate cotton when applied as recommended. The writers point out that defoliation efficiency depends upon the growth history and status of the cotton plant, and particularly upon weather conditions during and immediately following application. Rates of application are often dependent upon variations of these same limiting factors.

Both dusts and sprays are listed among the available defoliants. Defoliant dusts include calcium cyanamide and monosodium cyanamide. Sprays—for use generally in areas where there is an absence of dews and humidities are low —include ammonium thiocyanate, potassium cyanate, sodium chlorate-sodium pentaborate and sodium monochloroacetate. Listed under experimental defoliants are monosodium cyanamid, soluble grade, E. C. 3504 and sodium thiocyanate.

In the booklet, "Chemical Defoliation of Cotton—Second Report of Progress," defoliation workers point out that the area guides for the use of defoliants are general, based on average conditions. Cotton producers are advised to consult their local defoliation worker for more specific information. A list of cooperators in each state appears in the appendix of the publication.

The booklet describes the available defoliants, tells where the various chemicals may be used most effectively and recommends time and rates of application. Listed also are factors limiting efficiency, needs and benefits, precautions for handling, types of application equipment and sources of supply, giving both chemical and trade names of the various defoliants.

Cotton Classing School Attracts Wide Interest

Fifty-eight cotton buyers, ginners, producers and others interested in cotton merchandising enrolled in the Tennessee Cotton Classing School sponsored by the University of Tennessee and the Mid-South Cotton Growers Association at Memphis July 24-29. The states of Kentucky, Arkansas, Louisiana, Mississippi and Missouri as well as Tennessee were represented.

A. L. Smith, chairman of the Board of Supervising Examiners for Cotton Classers, discussed basic principals of cotton classing, keeping in mind that the majority of the students had never had any experience in classing cotton.

Environmental effects on cotton and the new outlook on cotton breeding were explained by N. I. Hancock, plant breeder at the Tennessee Experiment Station. R. P. Mullett, extension entomologist, talked on cotton insects and how to control them. E. C. McReynolds, associate Extension Service director, discussed agricultural trends in Tennessee, comparing them with trends throughout the nation.

Harrold B. Jones, extension cotton ginning specialist, spoke on modern ginning practices. Urging cotton buyers to discuss with farmers and ginners any factors which come to their attention that would be detrimental to cotton quality, he pointed out that too often buyers discuss poor gin work among themselves but do not bring the matter to the attention of the ginner, who may be unaware of the defect.

"Rediscovering Cotton" was the topic of a talk by W. Kemper Bruton of the National Cotton Council. He pointed out the services rendered to the cotton industry by the Council.

Speaking on "Proper Handling of Baled Cotton," Lonnie Bennett, vice-president, Federal Compress Co., showed how improper handling of bales can lower their value.

The school was under the supervision of Harrold B. Jones; A. L. Jerdan, extension economist; and W. H. Harper, director of field service for the growers association.

• About 20 million acres of land are under irrigation in 17 western states.

New Book:

MELTING AND SOLIDIFICATION OF FATS

Alton E. Bailey of the Girdler Corporation's Votator Division, Louisville, Ky., is the author of a new book just published by Interscience Publishers of New York and London. Title is *Melting and Solidification of Fats.*

Contents of the volume are General and Theoretical Considerations; Laboratory Techniques; Melting and Solidification of Pure Compounds; Melting and Solidification of Mixtures; Solubility; and Practical Melting and Solidification Processes.

The author states in the preface to the volume: "In preparing this volume, a first object has been, of course, to collect from rather widely scattered sources all available material on the subject. A second object—and one sought as diligently as the first—has been to correlate and interpret the experimental data in such a manner as to reveal the interrelationships between different phenomena associated with phase transformation, as well as the systematic variations that occur in specific properties of fats with similar variation in their molecular structure."

Melting and Solidification of Fats is obtainable from Interscience Publishers, Inc., 215 Fourth Ave., New York 3, N. Y., at $7 a copy.

• We're usually a courteous listener, but we can't abide a personal life history when we're hungry.

Moller Is Administrative Head of Kingsburg Mill

Election of James W. Moller as vice-president and general manager of the Kingsburg Cotton Oil Co., Kingsburg, Calif., has been announced by the oil mill's board of directors.

Secretary-Treasurer Milo Erwin has been promoted to the position of assistant general manager, the board announced. He has been with the company 12 years.

Moller was formerly manager of the Private Brands Department of the Jelke Division of Lever Bros. Co., New York. He had previously been associated with The Proctor & Gamble Co. on the west coast and at Cincinnati for eight years and during World War II was administrator of the Edible Oils Division of USDA's Fats and Oils Branch.

Richard W. Fewel was advanced from vice-president to president of the Kingsburg Cotton Oil Co. early in the summer, succeeding E. J. Cecil, who had been president and general manager. At the same time John H. Dinkins was appointed vice-president and secretary-treasurer.

Dr. N. C. Hamner, Veteran Chemist, Ill at Home

Dr. N. C. Hamner, president of Southwestern Laboratories, Dallas, who has been confined to his home with illness for the past 10 days, is showing improvement and can sit up for about an hour and a half at a time, his office advised late this week. Dr. Hamner is a veteran chemist in Texas and is well known to the crushing industry in the Southwest. We know his host of friends will be happy to learn that his condition is improving right along.

1950 Loan Rates Announced

USDA has announced that average loan rate for Middling ⅞ inch upland cotton, gross weight, produced in 1950 will be 27.90 cents per pound, which is 90 percent of parity price of cotton as of Aug. 1, 1950. The Aug. 1 parity price is 31.00 cents per pound. Last year the average loan rate for Middling ⅞ inch cotton, gross weight, was 27.23 cents per pound. The average rate for Middling 15/16 inch cotton will be 29.45 cents per pound, gross weight.

• Although over 13 million tons of fertilizer are being spread annually on U.S. farmlands, fertility is still being lost through leaching and erosion 10 to 20 times as fast as it is being replaced.

Proud Father—Three Times Over

Roy Newsome, employee of the Southland Cotton Oil Co. mill at Corsicana, Texas, was a triply proud father Aug. 2 when two girls and a boy were born to his wife at a Corsicana hospital. The Newsomes have four other children, two boys and two girls.

Mississippi Mill Operator Makes Executive Changes

At a meeting of the board of directors of Mississippi Cottonseed Products Co., Jackson, Miss., held July 26, the following changes were made in the executive personnel of the company:

W. D. Lowe, who has served as president the past two years and as general manager for several years before being made president, was elected chairman of the board.

H. E. Covington, secretary and general manager for the past two years, was elected president. He was manager of the Belzoni, Miss., plant for several years and is a director and member of the company's executive committee.

J. B. Perry, Jr., a vice-president for the past two years, was elected vice-president and general manager. He was manager of the Grenada, Miss., plant for a number of years and is a director and member of the executive committee.

George E. Covington, who has served as vice-president for the past two years and as manager of the Magnolia, Miss., plant for several years, was re-elected a vice-president. He is a director and member of the executive committee.

John R. Mason, treasurer and a member of the board of directors and the executive committee, was elected secretary-treasurer. Mrs. M. Russell was re-elected assistant secretary-treasurer.

Small Cotton Crop Is Reported in Peru

The 1949-50 cotton crop now being harvested in Peru is estimated at 275,000 bales (of 500 pounds gross weight) from 296,000 acres compared with 309,000 bales (revised) from 370,000 acres in 1948-49, according to a report to USDA from the American Embassy, Lima. The production of Tanguis cotton this year is about equal to that of other recent years and the quality is reported to be good.

Dedicate $150,000 Gin At Gilliam, La.

Open house was to be held Aug. 1 at the new $150,000 plant of the Gilliam Gin Company, Gilliam, La.

Dan P. Logan, president, invited farmers from up and down the Red River—from Natchitoches, La., to Idabel, Okla.—to attend. "During the day," he said, "75 bales of seed cotton that were saved from last year will be ginned. Some of this cotton was machine-picked and some was hand-picked. All of it is plenty rough."

Tours of nearby farms were planned so visitors could see the results of insect control, pasture development, and drainage.

The gin, according to Logan, is "dedicated to better agriculture," and if there is a better way to describe the service a modern gin plant is in a position to give the farmer we haven't heard it.

Congratulations to the Gilliam Gin and the men who built it, and to the farmers who will benefit from its modern facilities for ginning today's cotton crop.

SOLD EVERYWHERE BY QUALITY SEEDSMEN

THE SINKERS CORPORATION
KENNETT, MISSOURI

Classified Advertising

RATES: Nine cents per word, per insertion. Include your firm name and address in count. Minimum advertisement $2.00. Strictly cash basis—enclose check with order. Write copy plainly.

Oil Mill Equipment for Sale

FOR SALE—Oil mill equipment including Anderson expellers and French screw presses.—Pittock and Associates, Glen Riddle, Pa.

FOR SALE — Three-section cage French screw presses with 40 h.p. flange mounted motor and tempering bin. Also No. 1 Anderson expellers, belt driven, attractively priced. Inquire—Box 493, care The Cotton Gin and Oil Mill Press, P.O. Box 444, Dallas 1, Texas.

FOR SALE—36" Bauer Bros. attrition mill directly connected with 50 h.p. motors, ball bearing. Attractively priced. Inquire—Tupelo Oil & Gin Co., Tupelo, Miss.

FOR SALE—Two Smith vale round column 14 box presses. Four Davidson-Kennedy round column 16 box presses. One Davidson-Kennedy cake former. One set 48" crushing rolls. One Davidson-Kennedy 6 plunger high pressure pump. One Davidson-Kennedy lower pressure pump. One Davidson-Kennedy accumulator. Inquire—Box 108, care The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

Gin Equipment for Sale

FOR SALE—One 14 ft. Hardwicke-Etter bur machine, also used parts for 14 ft. Hardwicke-Etter bur machine.—W. H. Ritchey, Haslet, Texas.

HEADQUARTERS for good, late model used and reconditioned cotton gin machinery, engineered to meet your particular conditions. We usually have in stock and available Mitchell and other makes of extracting feeders, overhead bur machines, gins, lint flues, distributors, hydraulic presses, etc., at reasonable prices. Also, gas and diesel engines, electric motors and auxiliary equipment. Our long experience enables us to render you valuable assistance in selecting suitable equipment for your needs.—R. B. Strickland & Co., 13A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—5 H.E.C. Hardwicke-Etter extractor-feeders, A-1 condition, $450 each, f.o.b. Roswell, N. Mex. Address—Roswell Gin Co., Roswell, N. Mex.

FOR SALE—Two 10 ft. Hardwicke-Etter wood frame bur machines. One left hand and one right hand. Both in good condition, and have never been used in sand.—W. H. Ritchey, Haslet, Texas.

FOR SALE—8 Continental Model "C-66" Triple X extractor-feeders. Write— Box"XXX," care The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

AUTOMATIC gas heaters delivered and installed in your gin plant. See advertisement on page 26 this issue.—Service Gin Co., P. O. Box 21, Ville Platte, La.

FOR SALE—5-80 Lummus gin complete, cleaners, driers, etc., with or without building or power. Acreage cut forces gin to close. Price very cheap. Phone 1125J or write—H. E. Lacey, Lufkin, Texas.

GINNERS—Check this list for equipment you may need. One Continental Paragon steel bound press, with or without hydraulic ram and casing. 4-80 saw Continental Munger air blast gins, with or without lint flue and 60" all steel condenser 4-80 saw Lummus "Automatic" and 4-80 saw Murray steel air blast gins. One 43" Stacy steel dropper. One 52" Stacy steel vacuum box. One Beaumier rebuilt hydraulic pump. Hydraulic rams and casings. New Phelps fans for every purpose. Used and rebuilt steel and cast iron fans. One 52" six cylinder Murray all steel model "H" straight line cleaner with steel "fan type" cylinders. Two 52" type MS Murray steel droppers. One Murray steel automatic tramper. New tower driers, gas and butane burners. "Anything for a cotton gin," at prices you can afford to pay. —R. B. Strickland & Co., 13A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—One 10 ft. Lummus bur machine, wood frame, in good condition.—W. H. Ritchey, Haslet, Texas.

FOR SALE—3 Mitchell extractors equipped for drier. Will fit any 70-saw gin and any 80-Murray or 80-Lummus gin. Thoroughly reconditioned and guaranteed. $300.00 each. f.o.b. Blytheville, Ark. Write—Moody L. Barrentine, Box No. 5032, Binghampton Station, Memphis.

FOR SALE—Six 60" standard Mitchell machines. One 66" standard Mitchell machine. — W.H. Ritchey, Haslet, Texas.

Equipment Wanted

WANTED—Two expellers complete with cookers. Must be first class condition. Give serial numbers, make, age, price, etc., first letter. 1 50- or 60-h.p. Kewanee boiler. 1 or 2 filter presses. Write —Box "PF," care The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

WANTED TO BUY—One No. 153 Bauer Bros. separator unit and one 30" Bauer Bros. ball bearing disc huller. Above equipment must be in good order.—Purchaser, Box 10, Marianna, Fla.

Personnel Ads

WANTED—One first class repairman and one first class linterman. Permanent position for the right man.—H. L. Morsbach, Western Cottonoil Co., Richmond, Texas.

WANTED—Experienced gin manager at once. Good opportunity for right man. Give reference. Write—A. J. Cowley, Ralls, Texas.

POSITION AVAILABLE—for top flight cottonseed oil mill engineer and cottonseed chemist to work in West Pakistan, near Karachi. Good terms; three year contract. For details write to—Mr. Amjad Ali, 1742R Street, N. W., Washington, D. C.

ALL AROUND GINNER desires position. Capable of managing, erecting, and maintaining. Do all engine work—steam, diesel and natural gas.—W. W., 116 E. Ninth St., Dallas, Texas, Phone Y8-3831.

OIL MILL SUPERINTENDENT — Desires mill in Texas. Would consider assistant superintendent or night man. Machinist by trade. Can furnish list of references Write—Box "FW," care The Cotton Gin and Oil Mill Press, Box 444, Dallas 1, Texas.

POSITION WANTED—Seventeen years experience in oil milling as bookkeeper-accountant, seed buyer, selling, management, etc. Desire permanent connection. Location immaterial. Details and references on request. Write Box "KW," care The Cotton Gin and Oil Mill Press, Box 444, Dallas 1, Texas

WANTED—Gin stand man to operate 4-80 Murray gins. Good salary.—Fulton Gin, Route 8, Waco, Texas.

Power Units and Miscellaneous

FOR SALE—International cotton picker, bought brand new in July last year. Picked 11 bales of cotton last season. Any reasonable offer accepted —Box "VW" The Cotton Gin and Oil Mill Press, Box 444, Dallas. Texas.

FOR SALE—One rebuilt 8" x 9" four cyl. Twin City engine. Sales and service on all sizes of Twin City engines.—Fort Worth Machinery Co., 1123 East Berry. Fort Worth. Texas.

FOR SALE—1 66 h.p. high pressure vertical boiler. 1 ½ h.p. automatic stoker for coal (new last year), 1 24" stack (new last year), 1 four-section Mitchell steam radiator. Valley Field Gin Co., Yarbro, Ark.

FOR SALE—Two 8" x 9" six cylinder Twin City engines. One clockwise and one counter-clockwise. Both in good condition.—W. H. Ritchey, Haslet, Texas.

FOR SALE—1 St. Louis Corless steam engine, 750 h.p. size 26 x 54. 18 ft. x 44" flywheel. Right hand. Serial No. 1610. In first class condition. $2,500.00.—McAlester Oil Mill Co., Box 275, McAlester, Okla.

FOR SALE—Two standard 14" pistons for type "Y" VA 120 h.p. Fairbanks-Morse engine. Ginned less than 500 bales cotton.—Fulton Gin, Route 8, Waco, Texas.

FOR SALE—Two 10 x 14 ft. steel tanks, rounded bottoms, quarter-inch steel. Also one eight or 10 gauge galvanized tank 10 x 21, with top. All tanks in excellent condition.—R. L. Batte, Cameron Cotton Oil Co, Cameron, Texas.

FOR SALE—One 1,000,000 B.T.U. Continental heater for $300.00. One 40" and one 35" ball bearing fan, $75.00 each.—W. H. Ritchey, Haslet, Texas.

ALL STEEL BUILDINGS for cotton industry—warehouses, cottonseed houses and gin buildings. —Marvin R Mitchell Construction Co., 1220 Rock Island, Dallas, Texas. Phone C-5615.

FOR SALE CHEAP—Two 120 h.p. F/M diesel engines; one 14 x 15 Skinner steam engine; five Continental XXX cleaner-feeders with 3 cylinder after cleaner. Address—Muskogee Cotton Oil Company, Cotton & Gin Department, P. O. Box 1567, Telephone 8118, Muskogee, Okla.

FOR SALE—One Farrar-Theft 72 h.p. self contained boiler. Practically new. Complete with steam gauges, water columns, low water cut-off, two steam outlet valves, slow opening blow out valves, double pop-off valves and Enterprise rotary oil burners, all complete, $2500.00 f.o.b., Tampa, Fla.—Box 10, Marianna, Fla.

FOR SALE—M-12 International cotton picker. Has picked only 139 bales. Excellent condition. Selling only account of small acreage this section.—Parker Gin Company, Sylacauga, Ala., Telephone 294.

• The estimated crop of 99 million pigs in 1950 is four percent larger than this country's crop last year, 10 percent larger than the 10-year average.

Delta Ginners Attend Short Course

A short course for owners and operators of cotton gins in the Mississippi Delta was held at Leland Aug. 2-3-4. Purpose was to supply information that would result in better ginning during the 1950 season. The short course was sponsored by the Mississippi Extension Service and the Delta Council.

Scheduled to discuss various phases of the ginning processes were Charles M. Merkel, engineer in charge of the U.S. Cotton Ginning Laboratory at Stoneville; Vernon Moore, fiber technologist at the U.S. Fiber Laboratory at Stoneville; John Ross, also of the Fiber Laboratory; Charles Oglesbee, U.S. extension ginning specialist, Atlanta, Ga.; and Tom Johnson, Mississippi extension ginning specialist. Charles A. Bennett, in charge of U.S. ginning investigations, Stoneville, was to summarize the short course and lead a discusssion of problems presented.

D. D. Day, vice-president of The Murray Co., Dallas, representing the gin machinery manufacturers on the program, discussed "Relationship Between Gin Manufacturers and Ginners in Promoting Better Gin Operation."

In his talk Day referred to charges made in recent months by some spinners that lint cleaners damage the cotton fibers. "Up to the present time," he said, "I have not seen a single piece of evidence produced by spinning interests in support of their claims against lint cleaners that resulted from a thoroughly controlled test." He said that in his opinion less than four percent of the 1950 crop was processed through lint cleaners and concluded from this that "a very small percentage of the cotton is being blamed for a very large percentage of the so-called nep count trouble" encountered by spinners. Day pointed out that "some of the cleaning processes used in cotton mills produce neps in large quantities."

The Murray Co. official went on to say that "some operators of gin plants have used methods which we know do tend to bring about the troubles reported by spinners. Some of the better equipped plants are not properly adjusted and not properly operated. Some of this fault could be placed at various levels, and I do not say that manufacturers of machnery have in all cases been blameless. In some areas the large 1949-50 crop taxed the capacity of existing gin plants to the point that it was necessary to gin at hourly rates, which everyone knows were above the rates at which gin plants can do the best work. In some areas this exceedingly large crop also brought about harvesting conditions that caused the cotton to be brought to the gin plant in condition that would not allow the plant to turn out a good class of work regardless of the type of operation given the plant. It is also known that growing conditions have a lot to do with the final sample, and it is entirely possible that adverse growing conditions in certain areas brought about at least a portion of the conditions reported by spinners."

Day quoted figures released recently by the Production and Marketing Administration, USDA, showing the percentage of rough preparation of cotton processed through gin plants in the U.S. from the 1941-42 season through the 1949-50 season. These percentages were: 1941-42, 7.2 percent; 1942-43, 7.9 percent; 1943-44, 5.7 percent; 1944-45, 8.5 percent; 1945-46, 6.7 percent; 1946-47, 7.6 percent; 1947-48, 2.9 percent; 1948-49, 3.1 percent; 1949-50, 2.6 percent. "From these averages," he said, "it is apparent that while the nep count may have been growing, the percentage of rough preparation has certainly been coming down."

Day then discussed at length the recently announced four-point program developed by state and federal extension services to insure better ginning of the 1950 crop. The four points are: (1) maintain uniform loose rolls; (2) keep overflow to a minimum; (3) use only necessary cleaning equipment; (4) use only enough drying to insure smooth ginning. The Cotton Belt's regional extension ginning specialists and state specialists are already busy putting this program into effect (CG&OMPress, July 22, page 17).

"Operators of gin plants," he said, "have been saddled in recent years with the responsibility of operating a complicated processing plant, and in at least some cases the educational work of properly equipping these operators with the know-how necessary to make the plants perform properly has not been adequately carried through. The importance of seeing that these modern well-equipped gin plants are properly operated has been forcibly brought to the attention of all of us in recent years. I am very glad to see the interest being shown all over the cotton growing belt by owners and operators, and I am sure that programs which are being instituted and which will be instituted will bring about better results for all of us. Speaking for the manufacturers of cotton gin machinery, you have our assurance that we will assist in every way possible to bring about better operation of cotton ginning plants."

From our Washington Bureau

By FRED BAILEY
and JAY RICHTER
Washington Representatives
The Cotton Gin and Oil Mill Press


BAILEY


RICHTER

• **Who Will Control Us?**—The battle of the bureaucrats is going full tilt in Washington. They assume that the country must be controlled and directed from Washington. The battling is over who should do the job.

Congress is showing every indication of turning the job over to the Administration. How it shall be divided up among the various administrative agencies still hasn't been settled.

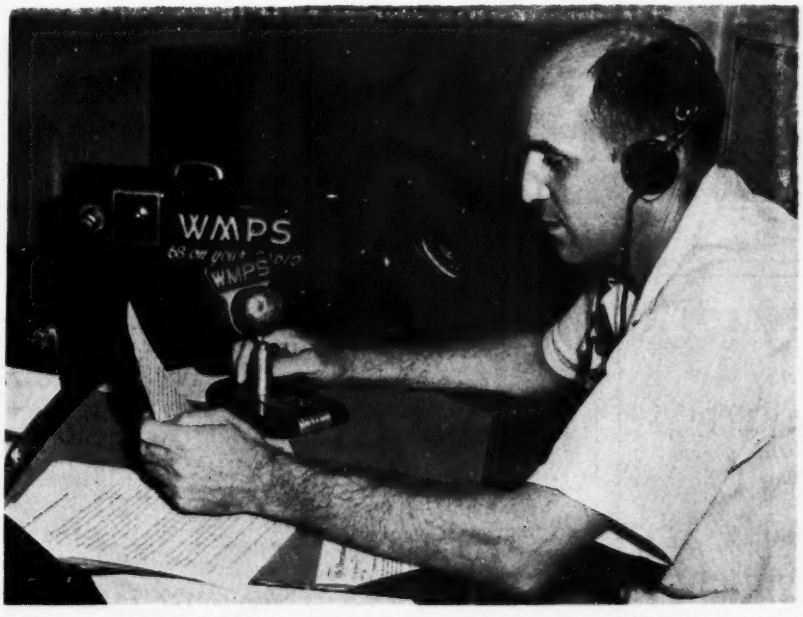
The big question is: Should controls be administered by existing government departments and agencies, or should new agencies be created to do the job?

President Truman wants the job done by the regular departments. He thinks that recreation of such World War II agencies as the OPA, War Production Board and War Manpower Commission would not set well with voters whose blood pressure goes up every time OPA, for example, is mentioned.

If the President's wishes are followed the Agriculture Department would handle the OPA job of rationing and price control. Secretary Brannan, however, isn't anxious to take on such a major headache. He fears he would be caught in the middle between producers and consumers.

It is a good bet, though, that if and when price and rationing controls come —which may be sooner than most people think—Brannan will get the job. Some USDA officials who recall their bitter battles with OPA think it might be easier to take on the whole job.

Commerce Department is due to get the WPB job. That is okay with Secretary Sawyer. He already has begun recruiting a force to do the job. Labor



BROADCASTING weather reports to farmers from Station WMPS, Memphis.

Weather Reports for Mid-South Farmers

Weather information especially for cotton farmers is being broadcast daily over a Memphis radio station.

The broadcasts for producers in Tennessee, Arkansas and Mississippi have been initiated by the U.S. Weather Bureau, Tennessee Agricultural Extension Service, National Cotton Council and Radio Station WMPS.

Forecasts of probable rainfall, moisture conditions, wind velocities, temperature and other news of value in operations such as insect control, defoliation, etc., are aired over the station daily.

The service is being advertised in special spot announcements emphasizng the importance of the weather service to cotton farmers. The spots, during the period of high boll weevil incidence in the area, also contain pertinent information on pest control.

Objective of the program is to develop and distribute weather information to assist farmers in various phases of cotton production.

Broadcasts are in conjunction with a Beltwide forecasting plan now being studied by a special committee. Represented on this committee are the U.S. Extension Service; Division of Cotton and Other Fiber Crops, Bureau of Plant Industry, Soils and Agricultural Engineering, USDA; Bureau of Entomology and Plant Quarantine; the U.S. Weather Bureau, crop reporting services; and the National Cotton Council.

Secretary Tobin is set to take on the war manpower job whenever he gets the green light from the White House.

• **Farm Labor and the Draft**—Tentative plans already are being laid for joint Agriculture-Labor Department administrative machinery for recruiting, transportation and management of agricultural labor. The job was done in the last war by USDA.

Present plans call for USDA to estimate agricultural labor requirements. The Labor Department's U.S. Employment Service would then undertake to recruit the needed workers, first from domestic sources and then through importation of foreign workers.

USDA would take over management of the agricultural labor force, supervise training, transportation and housing. It is contemplated that employers of farm labor would at least contribute toward the cost of transportation and housing, a cost borne by the government in World War II.

USDA also would have responsibility for setting up the guides for draft deferment of farm workers. Deferment probably would be, as in World War II, based on "units of production." However, because of increased use of machinery on farms the number of units needed to obtain deferment probably would be larger.

There has been some discussion of methods to prevent a return of workers to farms just ahead of the draft in an effort to escape the draft. One suggestion has been that deferment be denied those who had returned to farms within six months of the date of their draft summons.

• **Cottonseed Support Program**—Unless Agriculture Department officials change their mind there will be a cottonseed loan and purchase program this year. PMA officials preparing the support docket say they have had no instructions to the contrary.

There have been some hints, however, that the top policy heads at USDA may decide to hold off on announcement of a support program as long as market prices stay above contemplated support levels. Supports below market levels might tend to break the price, one official explained.

They reason this way: If market prices are $10 to $15 a ton above the probable support level, the announcement of supports might have very little effect. But if the spread were $5 or less the market almost certainly would be weakened.

It isn't the market price that has been delaying announcement of a support program as much as it has been difficulty over the wording of a proposed contract with ginners. That has been the real stumbling block.

The contract offered ginners contained the so-called anti-discrimination clause provided for in the Fair Employment Practices Act. It limits the right of ginners to hire and fire. That clause was "accidentally" left out of the 1949 contracts. PMA officials said the omission had been "called to our attention."

Many ginners balked at signing a contract with that provision in it. USDA pointed out that the law requires that all government contracts include it. The deadlock, however, may be broken through USDA offering ginners an "agreement" instead of a contract. The law doesn't require inclusion of the clause in agreements.

• **Acreage Controls Probable in 1951**—Department officials are cautioning the cotton trade not to jump to any conclusion that the sky will be the limit on 1951 cotton acreage. Unless unexpected developments cause a change in plans there will be only a moderate increase in acreage allotments.

Unofficial and still tentative talks are on the basis of a 1951 allotment of around 22 to 23 million acres. Officials think the August, 1951, carryover will be close to four million bales. They regard a carryover of four to five million bales as "just about right."

Acreage allotments for next year will be tailored to result in a crop just a little over estimated domestic mill and export requirements for the following year. Some officials think that may not be more than 12 million bales.

There is a good chance, based on present USDA discussions, that marketing quotas will not be proclaimed for the 1951 crop. Officials think the law as now written would not make quotas mandatory.

• **Brannan Burns, but Holds Firm**—Secretary Brannan would take off his shoes and walk through fire for his chief, President Truman. The other day he did almost that while under a hot crossfire from the House Agriculture Committee.

Brannan was testifying on his proposal that the government pay transportation and repackaging costs for relief agencies which agree to take surplus

eggs, butter, milk and cheese. Suddenly and without warning Rep. Steve Pace of Georgia "lowered the boom."

He asked Brannan how he stood on Section 412 of the Defense Production Act of 1950, the war powers bill then before the House Banking and Currency Committee. That provision would have lowered the legal rate for sale of CCC surpluses to the "support price." The present law sets 105 percent of supports plus reasonable carrying charges as the minimum price.

The lower sale price would be desirable, Brannan said. It could be used, he said, in stemming inflation in prices of commodities held by the government. That answer "deeply shocked" Mr. Pace.

What the Secretary was asking, Pace observed, was authority to use government-held commodities to establish the support price as also the ceiling price. Brannan denied any such intentions. It was plain to committee members that the line of questioning was making Brannan uncomfortable.

Later the same day, Brannan got through to the White House with the urgent suggestion that Section 412 be stricken. The White House promptly accommodated. The fact is Brannan was not consulted about including that section in the first place and, in the second place, didn't approve of it.

• **Wetbacks: Out Again, In Again**—Horatio at the bridge had nothing on the U.S. Immigration Service. The USIS, in collaboration with the U.S. Employment Service, has just negotiated an unique farm labor arrangement with Mexico.

Under the arrangement the Immigration Service will continue to pick up wetbacks on this side of the border and escort them to the nearest bridge over the Rio Grande.

The Mexican government, waiting on the other side of the bridge, will give re-entry cards to a previously agreed upon number. The erstwhile wetback will then recross the bridge to the U.S. side and thus become "legal" and eligible for employment in this country.

Last year Immigration reports it returned some 600,000 wetbacks to Mexico . . . some of that number, however, may have been duplications. USES thinks the present arrangement will provide all the farm workers needed for cotton picking and other jobs this fall.

Research and Marketing Act

(Continued from Page 15)

can be made through improved methods and equipment for handling farm commodities in market channels. One of these studies shows, for example, that labor costs can be reduced at least 25 percent in many warehouses by a modified method of stacking bales of cotton.

Beginning in the fall of 1947, commodity specialists were assigned under the RMA to work in this country and abroad to help stimulate foreign demand for such commodities as cotton, tobacco, rice, fruit, and a number of others. With regard to cotton, the prospects are not too encouraging, according to first-hand reports. Western Europe is keenly aware of the approaching termination of the European Recovery Program. Preparations for that eventuality involve three possible aternatives: Because of the dollar shortage, Western Europe countries will likely buy as much cotton as possible from soft-currency countries; countries with cotton-producing colonies are trying to increase production in those colonies; and many countries are planning to fall back on rayon. A brighter side of the picture is the reports that American cotton is extremely popular among European spinners because of its superior spinning qualities.

The foregoing summary of RMA activities on cotton reflects, I believe, a good pattern by which to fashion continuing effort aimed at improving cotton production, utilization, and marketing. It should, thereby, tend toward insuring, also, the place of cotton in our total economy.

C. C. Murray Promoted by University of Georgia

The board of regents of the University of Georgia recently named Dr. C. C. Murray dean of the College of Agriculture. He formerly was director of the school's agricultural experiment station at Griffin. Dr. O. C. Aderhold, who was dean of the College of Education, was named president of the University by the board of regents.

• Forest rangers estimate that 280,000 vacationers can be accommodated at one time in the 4,500 camping and picnic areas in U.S. national forests.

Cotton's Production Problems

(Continued from Page 20)

removed from the seed bed, and the seed are placed in firm ground. The cotton thereby is planted at a more uniform depth, emerges more rapidly, is not as subject to the hazard of a spell of dry weather, and gets an even start with grasses and weeds. As soon as the cotton comes up, it is cultivated at higher tractor speeds with high speed sweeps and with rotary hoe attachments on the cultivator when conditions are favorable. Sometimes when packing rains occur, the rotary hoes are run previous to emergence and a stand is obtained when it would be difficult otherwise.

When the cotton plant attained the stage where it was beginning to square, we followed an experimental program of spraying for early boll weevil control. This was done by the same sprayers attached to the cultivators which were used for thrips spraying.

The new insecticides have given us better tools with which to work, and great strides have been made in cotton insect control in what is frequently termed "preventive entomology." This has involved the application of insecticides on the cotton plant early in the season to inhibit or prevent insect damage. As the field of preventive medicine has advanced rapidly in the last few years to provide better health and longer lives for man, so has preventive entomology come along to offer the cotton farmer greater protection against the ravages of insects.

The early insect control program outlined by our federal and state entomologists included the use of five or six applications of poison beginning at the time the first two leaves spread and continuing through the month of June. This phase of the program has been completed. The lowest per acre cost for six applications of the cheapest insecticides was $3 and the highest $6.70, if the most expensive poison was used. The cost of application has been dependent upon whether the farmer chose to apply the insecticides at the time of cultivation or as a separate operation.

The results following five or six applications of poison have been almost phenomenal. Because I am most familiar with my own operation, I would like to cite some of the average boll weevil infestation records made last week following early season poisoning on several plantations: Kelso one percent, Omega one and one-half percent, Reality four percent, Shilo six, and Levee five percent. Untreated fields in the same vicinity average from 26 percent to 50 percent punctured squares. The same general trend is apparent in treated and untreated fields throughout the Mississippi Delta. A few days ago I was told that on another farm where early poisoning had been practiced, the boll weevil infestation was four percent and on the adjoining untreated farm it was 70 percent.

The late season program of spraying or dusting will be carried out according to indicated needs at the time that infestation begins to build up in the larger plants, and especially after the flight of weevils begins.

Poisoning is considered as a protective practice. Its cost, when properly applied under conditions existing in the south Delta, nearly always pays a handsome return on the money invested.

We are following all of these practices in the hope that the extra expenditure will be economic and will increase the production to the extent of lowering the cost. It is very difficult to follow any procedure of cost accounting on lint production due to the fact that cotton is a crop of two cash commodities, the lint and the seed. As practical farmers, we have never been able to differentiate between the cost of production on the seed and the lint. However, if we consider all production costs as applying to the lint, credit will have to be allowed for the value of the seed, and since the price of seed is a variable quantity, it will have a varying effect upon the balance of the cost which will apply to production of lint.

After all of the items of cost of production have been taken into account, such as taxes, management, depreciation of improvements and equipment, seed (including chemical treatment of adapted varieties), fuel supplies, labor, etc., it is obvious that none of these makes the same contribution to the economy of production that fertilizer does.

The use of anhydrous ammonia fertilizer has proven to accomplish a saving in cost of production principally because of the saving in cost of material, but also due to some economy in the cost of application. At a 60-pounds of nitrogen rate of application per acre, our figures show a saving of $3 per acre under the cost of the most economical of the solid materials. The comparison is based on car-lot purchases of both materials.

Our experiment stations are showing the way to make the maximum production by use of optimum applications of fertilizer to obtain the most favorable cost results and we can well afford to follow their counsel. After the expenditure of the tremendous amounts included in the other costs, it is very unwise to economize on fertilizer to the extent of a few dollars per acre when its productive result is many times that amount.

The distribution of the overhead as between the various crops is another factor that will affect the cost of production of each of them. We have found it rather difficult to handle such items of overhead as depreciation on buildings, management, taxes, depreciation on equipment, insurance, interest, building repair, and truck expense so as to give a fair distribution of them to all of the different crops. As a result, we have preferred to average out most of these and make mental adjustments where some crops such as oats might be obviously penalized. The other crops that we grow have a definite effect on the cotton operation, because two-thirds of our cultivated land is devoted to them. If any one of these other crops is unprofitable, it naturally will have to be supported by the profitable crops. We are, therefore, very much concerned with knowing the break-even point based on production and prices of these other crops. As in the case of soybeans, where contribution to soil fertility is not given consideration, it would really have value for this purpose and would also have some value in affording a wider distribution of the overhead costs.

It is going to be necessary to estimate the cost of production of the different crops largely on the experiences of 1948. Our 1949 figures have no value, since weather conditions were such as to distort our yields and cost figures to the point where nothing was normal. We have made a very careful analysis of 1948 costs and corrected them for changes in practices that will apply this year. These changes include the early thrips and boll weevil poisoning program and heavier applications of ferti-

lizer to cotton and oats. Using the figures that are included in our budget, we can estimate the cost of production of a pound of lint based on a 500-pound yield and the credit given for seed of $5 per acre. The cost of ginning is not considered at all, and credit is given for the seed in the above amount because that is likely to be the amount of the seed ticket after our cotton has gone through a completely modern gin where the costs of ginning are approximately $5 a bale higher than in a conventional gin. On the assumption that 500 pounds is the yield of lint, the cost of production of the lint is figured to be about 15 cents a pound. If all of it were harvested by machinery, this cost would be reduced perhaps nearly two cents a pound. The figures used in the computation are $3.50 per day for hoe hands and $45 a bale for hand picked cotton delivered at the gin scales. Machine operators are figured at $6 a day.

With regard to the other crops, the distribution of some of the items previously mentioned is done on an average per acre basis, and in some instances the same average is applied to cotton. The weightier items, such as poison, fertilizer, seed, hoeing, and harvesting, are handled accurately according to the crop to which these apply.

We plant lespedeza for hay in most of our oats and consider the returns from both as one crop. On the basis of the rather high overhead that comes about as a result of our present system of accounting, we find that it will take one ton of lespedeza hay at $15 per ton on two-thirds of the acres, and 50 bushels of oats at 80 cents a bushel to break even. We have been averaging more than this for hay, but have also in recent adverse years averaged less than this yield of oats.

Costs for corn include a charge for 80 pounds of nitrogen per acre. The break-even point on corn will be 50 bushels at $1 per bushel. This estimate of prices should be conservatively low, and the yield ought to be conservative when this amount of fertilizer is used.

A yield of more than 20 bushels of soybeans at $2 a bushel will be required to break even. This is, without giving any credit for increased soil fertility as a result of planting soybeans.

It will require, then, at least these break-even points in order to have the crops other than cotton carry a share of the overhead that will give it a wider distribution and protect the profits that we hope to obtain from cotton. If it is demonstrated that we can produce staple cotton of 1-1/16 inches to 1-1/18 inches staple length at a cost of 12 to 15 cents per pound, you can estimate the profits of cotton farming. Our average grade, including hand and machine picked, is a split grade above strict low middling. An average lint yield of 550 pounds per acre would reduce the cost of producing lint by more than one cent a pound and 600 pounds would reduce it more than two cents below the previously mentioned estimated cost.

As has already been indicated, our operations are entirely mechanical for all the crops other than cotton and will require only one or two more picker attachments in order to completely mechanize the harvest of cotton.

I shall not go into the matter of machine harvesting to the extent of making a cost analysis study, because there is a wealth of information available that is more acceptable than our own. The

studies of the BAE and Delta Station are available and are certainly conservative and thorough. The average cost is something around $2.60 per hundred pounds of seed cotton and this figure includes field loss and loss in grade. The cost figures for the most efficient operators are much below this. We are rather convinced that the super gins will prevent grade loss on the average and the increased cost of ginning in them has already been taken into account in arriving at the net returns for seed. We are inclined to discount the field loss because we have used a net yield per acre figure above the field loss and our cost figures are based on that figure. This may be suggestive of Keyserling economics, but it makes for simplified bookkeeping. On these bases we are convinced that the cost of picking to a reasonably efficient operator should be less than $1.50 per hundred pounds of seed cotton. Depreciation on the machine is included, but not interest on the investment. If costs of transporting pickers, sacks, weighers, sack boys, ice water, etc., are considered, the hand price of picking to the individual picker would have to be very low to compete even when credit is taken for the higher recovery by the hand method. The Delta Station costs were figured on 106 bales of cotton per machine. Several good operators have gotten 300.

In our own case, cotton is the high income crop, both on the basis of total and net income. It is therefore obvious that the higher the proportionate number of acres in cotton, the more profitable the operation. This statement is true only so long as the acres are adaptable ones. With controls in effect, there is an arbitrary limit which is a matter of practical consideration and likely will be for some time. The non-cotton acres on a cotton farm will have to be utilized in such crops as will break even or better in order to prevent burdening the cotton acres with their losses. If they are not farmed, the cost of maintaining them as cultivated acres and their share of the overhead would then have to be borne by the cotton acres.

The pressure is certainly heavy upon us to produce efficiently and profitably on every acre of land. We can no longer be haphazard in our handling of these other acres and their crops. It is going to be of the utmost urgency that we produce these other crops with the same degree of efficiency that we are attempting to apply to cotton.

Commercial cotton farmers would like for government and agencies of the industry to do everything possible to promote increased foreign and domestic consumption of cotton so as to maintain the most profitable crop the Belt knows. This, of course, does not mean the production of cotton on lands which, for purposes of soil and human conservation, should be in other crops. However, there is a minimum of production beyond which we cannot go and support the agricultural economy of the Cotton Belt.

Stevens Heads Mississippi Farm Bureau

Boswell Stevens, Macon, Miss., a director of the National Cotton Council, has been named president of the Mississippi Farm Bureau Federation to succeed the late Ransom E. Aldrich, who was chairman of the Council's Production and Marketing Committee.

Mr. Stevens was recently renamed president of the Mississippi Federated Cooperatives.


HEATPROOF


FULTON BAG & COTTON MILLS
FOR 80 YEARS

At Dallas July 27-28 . . . Attention Turns to Cotton's Role in War

■ Speakers at Cotton Research Congress probe cotton's problems at home and abroad . . . evaluate competition of foreign growths and synthetics. All see urgent need for increased U. S. production should Korean conflict ignite war on other fronts.

DELEGATES to the eleventh annual meeting of the Cotton Research Congress at Dallas July 27-28 heard Burris C. Jackson of Hillsboro, chairman of the Statewide Cotton Committee of Texas, sponsoring organization, declare that America's cotton farmers may be called upon to produce prodigious amounts of cotton to support the country's military establishment should the U.S. again become involved in a worldwide conflict.

• **War Is Grim Reality**—"All of us are continuing to hope and pray that we may continue to think principally of cotton as a vital factor in a peaceful world," Jackson said. "Yet," he continued, "we cannot blind ourselves to the grim reality of what is taking place today in Korea. We cannot lose sight of the fact that once again American lives are being sacrificed in bloody conflict to preserve our way of life. We cannot but be aware of the fact that we and our allies, along with those who have established themselves as our enemies, may be tottering on the brink of a hell which will be recorded by historians as World War III."

Jackson, who made the keynote address to the Congress July 27, declared that we must increase the efficiency of cotton production and processing if the fiber is to meet the heavy demands made of it on the home and war fronts. "In peacetime this is a necessity to our people in the Cotton Belt if they are to remain competitive on a cost basis with other fibers seeking expanded markets. In wartime it is essential if we are to produce the volume of cotton needed with the lessened manpower available."

Gibb Gilchrist, head of the Texas A. & M. College System and chairman of the Congress program committee, welcomed the delegates to Dallas.

Dr. Louis E. Hawkins, vice-director of the Oklahoma Agricultural Experiment Station, Stillwater, presided at the opening session on the morning of July 27. Delegates heard talks by Dr. P. V. Cardon of Washington, administrator of the Agricultural Research Administration, USDA; Dr. Earl E. Berkley of Anderson, Clayton & Co., Houston; and Dr. D. M. Wiggins, president of Texas Technological College, Lubbock.

• **Cardon Reviews Cotton Research**—Dr. Cardon, whose paper is reproduced in full elsewhere in this issue, discussed "Cotton Under the Research and Marketing Act." "In view of ever changing economic conditions and the widely recognized need for keeping the consumption of farm products in better alignment with production," Dr. Cardon said, "the act very wisely calls for a greatly accelerated program of marketing and utilization research, education and service.

"For the first time," he said, "the Department was given practical authority to contract with public or private agencies to do marketing and utilization research; also, on a fund-matching basis, the Department can enter into cooperative agreements with state Departments of Agriculture and Bureaus of Markets to do marketing service types of work; not less than 20 percent of the direct-grant funds to state experiment stations under the RMA must be applied to marketing research; and as much as 25 percent of these direct-grant funds can be used for cooperative regional research in which two or more states have a common interest."

The USDA scientist reviewed the progress research has made in cotton production and harvesting, and told the Congress delegates that the search for new and wider uses of cotton and cottonseed has been broadened and intensified under the Research and Marketing Act. Virtually all of this work, he said, is being done by or is under the supervision of the Department of Agriculture's Southern Regional Research Laboratory at New Orleans. He asserted that the scope of the work at the Southern Laboratory is suggested by the fact that there are at this time 13 RMA sub-projects aimed at obtaining more fundamental knowledge about the characteristics of cotton fiber. Fifteen projects, he said,

In the Pictures, Opposite Page

■ **ON THE OPPOSITE PAGE are shown some of the personalities that helped make the eleventh annual Cotton Research Congress (Dallas, July 27-29) a success.**

■ **TOP—Burris C. Jackson, left, Hillsboro, chairman of the Statewide Cotton Committee of Texas and general chairman of the Congress, is shown with E. D. White, center, assistant to the Secretary of Agriculture and chief of ECA's Cotton and Fiber Division, Washington, and Gibb Gilchrist, right, chancellor of the Texas A. & M. College System and chairman of the Congress program committee. Jackson delivered the keynote address. White was a first-day speaker and Gilchrist welcomed the delegates to Dallas.**

■ **CENTER, LEFT—Shown here are three second-day speakers with Dr. A. B. Cox of the University of Texas, who presided at the session. Left to right: A. F. Leesch, Boerne, master of the Texas State Grange; Harold A. Young, North Little Rock, Ark., president of the National Cotton Council; Dr. Cox; and Dr. Watrous Irons, vice-president, Federal Reserve Bank, Dallas.**

■ **CENTER, RIGHT—Chairman of the night session July 27 was A. L. Ward, left, Educational Service director of the National Cottonseed Products Association, Dallas. Shown with Ward is James A. Kime of the Southern Regional Research Laboratory at New Orleans, who was in charge of a night-session feature called "Enter—New Cotton Products."**

■ **BOTTOM, LEFT—L. P. Gabbard, left, head of the Department of Agricultural Economics and Sociology at Texas A. & M., is shown with Noel Sargent of New York, secretary of the National Association of Manufacturers, who spoke at the final session July 28.**

■ **BOTTOM, RIGHT—L. T. Murray, left, Waco, Texas, general arrangements chairman for the Congress, is shown with two of the final session speakers. They are J. L. Rhodes, center, regional director of organization in the South for the American Federation of Labor, Atlanta, Ga., and W. E. Hamilton, right, who is economist for the American Farm Bureau Federation, Chicago.**

have the overall goal of developing new and improved products from cotton fiber through processing and chemical treatment, and seven projects aim to find new and improved products from cottonseed.

• **Berkley on Cotton Hybrids**—Speaking on "Potentialities of Hybrid Cotton in Future Markets," Dr. Berkley told the Congress delegates that superior hybrid cottons are an accomplished fact but warned that there are still problems to be overcome in combining their excellent fiber qualities with high yields that will give the farmer a fair return for growing them. Dr. Berkley said the new hybrid cottons were made possible through the manipulation of the chemical constituents of cotton in seed breeding and genetic laboratories. He pointed out that each of the three basic types of cotton found in commercial channels today possesses certain characteristics that may be considered superior for specific uses. The most important of these three types is American upland, which Dr. Berkley said carries the major load of production. A fiber of medium length, medium fineness and medium strength, American upland fills a multitude of needs and is the most widely used of all of our commercial cottons. This great middle-of-the-road fiber is also of medium cell wall thickness.

Another type is the extra long staple cotton commonly called the aristocrat of the cotton fibers. It is from these extra long staple cottons that we obtain our Pima shirts, ballroom dresses, linen-type cotton handkerchiefs and laces, and other fine cotton goods. This cotton is recognized, Dr. Berkley asserted, as the best general type of textile fiber in existence today when it comes to carrying the load of beauty appeal and serviceability. Included in this class of cottons are Sea Island (the finest, longest and strongest), and the Peruvian Pima and Egyptian types, including American-Egyptian.

The third group is made up of the specialty fibers, the Asiatic coarse wool-like cottons. These rough, coarse, thick-walled cottons are ideal for certain uses and go into blankets as mixtures with wool and rayon to give bulk. These cottons have large diameter fibers and thick cell walls that do not collapse as do the upland cottons. They stand up better under repeated laundering and retain a large proportion of their original crimp.

It is from cottons in these three groups that have come the new hybrids with stronger and finer fibers than any of the groups offers. They have more resiliency and Dr. Berkley said that the potentialities as to staple length are unlimited. One of the great advantages of hybrid cottons that have already been produced is faster and cheaper handling in the mills. Laboratory tests have shown that if these cottons are run at the same rate the mill can get better results than with conventional cottons.

• **Wiggins Discusses Cotton Research Needs**—In his paper Dr. Wiggins declared that "the position of the artificial fibers in the modern world markets results largely from huge amounts spent on research by a number of big companies. If we were able to match this research money on cotton, we would never need to fear for cotton's place in the world market."

"The synthetic people," Dr. Wiggins said, "have capitalized on a few favorable properties of their fibers and we have been satisfied to allow cotton to carry its own load. Properties in which the synthetics excel, such as luster, hand and drape, have been easy to exploit because they appeal to the vanity of the American people."

Dr. Wiggins said a more specific classification is needed to aid the mills in choosing the most economical cotton for their end product and told the delegates that in Texas "we are working toward this end by studying the many varieties and types of cotton from the fiber, yarn and fabric standpoints."

Dr. Wiggins declared that as competition grows keener in the world market quality goods will play a greater role in our competition with other fibers and with world markets. "In speaking of quality goods we must keep in mind all the operations which are quality producing from harvesting and ginning on up through processing for spinning and the spinning operation itself. There is room for improvement and we are not going to get it unless we demand it," he said. The speaker then listed some of cotton's most pressing needs and called on the industry to step up its efforts to meet those needs to the end that American cotton can successfully meet its competition here at home and abroad.

At the second session July 27 delegates heard talks by Dr. Claudius T. Murchison of New York, economist for the American Cotton Manufacturers Institute; Read P. Dunn, Jr., director of the National Cotton Council's Foreign Trade Division, Washington, D. C.; and E. D. White, assistant to the Secretary of Agriculture and chief of the ECA's Cotton and Fiber Division, Washington.

• **Dunn on Cotton Demand**—Declaring that prospects for peace are dim and that "we are entering the present emergency with a shorter supply of cotton than we had before World War II," Dunn expressed concern over the rapid disappearance of our surplus. "We entered World War II with about two-thirds of a year's cotton supply. We are entering the present emergency with about one-half of a year's supply. And the possibility of a supply outside the U.S. is not as good now as it was in 1938-39," Dunn said.

He said that while millions of acres of land are available for cotton production in South America and in Africa, "the problems of maintaining soil fertility, the problems of short labor supply and of the development of backward areas militate against rapid development of these areas." Thus, should a third world war develop, the burden of producing cotton in excess of present needs to meet the demands of war would rest largely on the U.S.

• **White Says Europe Wants U.S. Cotton**—Pointing out that the Marshall Plan has only about 18 months to run, White said that if European cotton buyers have the necessary dollars we have every reason to think that they will continue to buy U.S. cotton, and lots of it. "If they don't," he said, "they're bound to turn elsewhere—to cotton from other countries or to other fibers."

Regarding the present supply-demand situation, White pointed out that normal yields on the prospective 19,000,000 planted acres this year would give a crop of only a little more than 10,000,000 bales. For the season ending this week, he said, our use here at home and our exports add up to more than 14,000,000 bales. "Without any allowances for possible effects of present world trends," the USDA official said, "it looks as if there would be an outlet for 13,000,000 to 14,000,000 bales of U.S. cotton again this coming year—which begins next week. On that basis, we would use around 3,000,000 to 4,000,000 bales more cotton than may be produced this year.

"Should this turn out to be approximately correct, that would bring our carryover at the end of the coming marketing year down to 4,000,000 bales or less. That's as low as it's safe to go under present world conditions."

White asserted that in 1951 we should strive to bring our production up to demand, since we cannot afford to dig deeper into our reserves. "More specifically," he said, "if the demand in the 1951-52 season—and I do not wish to predict—should equal 13,000,000 to 14,000,000 bales of cotton, we will need to produce that much cotton next year."

• **Ward Is Chairman of Night Session**—A. L. Ward of Dallas, Educational Service director of the National Cottonseed Products Association, was chairman of an extremely interesting night session in the Crystal Ballroom of the Baker Hotel June 27. James A. Kime of the Southern Regional Research Laboratory at New Orleans was in charge of the first part of this session which featured new cotton products. Kime sketched briefly the purposes of the laboratory and then described several new cotton products that were shown the audience.

The second half of the program, called "Cotton Pickin's," was presented by the Texas Extension Service. This crowd-pleasure feature took the form of a style show in which 4-H Club boys and girls, Home Demonstration Club women and members of their families, and college students were models. Showing cotton fashions were tiny tots of preschool age, older boys and girls, and other nonprofessional models wearing work clothes, play clothes, bathing suits, shorts and blouses, school dresses, dressy cottons, knitted cottons and formals.

Dr. A. B. Cox of the University of Texas, Austin, presided at the third business session July 28.

• **Irons Discusses Place of Agriculture in U.S. Economy**—Dr. Watrous H. Irons, vice-president of the Federal Reserve Bank of Dallas, told the Congress that "our system of economic acitivity has enabled more people to enjoy a higher standard of living and a greater degree of security than has been the case under any other economic system," and went on to say that in his opinion we would make a mistake if we looked to the government to intervene in the operation of that system and to change the "rules of the game" on every occasion that seemed to hold a threat of temporary insecurity to one group or another. "As a general rule," Dr. Irons said, "I do not believe that government influence or intervention in economic activity can, in the long run, be based on the principal of assuring some predetermined level of income or income relationship to any particular group."

In discussing the status of agriculture in a free or private enterprise economy, Dr. Irons said: "Agriculture, more perhaps than any other major type of economic activity, is subject to periods of surpluses and shortages. In addition, agricultural production is probably less subject to flexible, quick adjustment by

the producer than is the case in the field of industrial production. These conditions, together with the fact that agricultural producers depend upon the demand of the more numerous nonagricultural segment of our population for the bulk of their market, tend to make agriculture peculiarly vulnerable to changes in the general level of economic activity and the state of prosperity or lack of prosperity. Consequently, agricultural producers have been subjected to recurring periods of severe economic instability resulting from very sharp and sudden price declines."

• **A. F. of L.'s Rhodes Attacks Taft-Hartley Law**—Another speaker at the final session July 28 was J. L. Rhodes of Atlanta, Ga., regional director of organization in the South for the American Federation of Labor. Rhodes struck at the practice of bringing Mexican laborers into the cotton South to help harvest the cotton crop and said that "King Cotton must eliminate that problem so it may play ball with American institutions and American labor and the people to whom the cotton industry expects to sell its products."

The A. F. of L. organizer also termed the Taft-Hartley bill "infamous" and called for its repeal.

• **Sargent Calls for Free Labor**—Noel Sargent of New York, secretary of the National Association of Manufacturers, said that Americans and other peace-loving peoples must support freedom in the present world crisis with as much zeal as communists show in supporting the power materialism which caused the invasion of South Korea. He called for "recognition of competition as the mainspring of economic progress," "recognition of thrift as a worthwhile human virtue," and efforts to promote mutual confidence and goodwill between employees and employers. He objected to proposals for control of labor and "the assignment of workers to particular employment by the government, whether in peacetime, defense period, or wartime."

"Free labor will always outproduce labor working under government compulsion," he declared. "Some people say that if men are conscripted or regimented in the armed forces, it is only fair to conscript and regiment the labor of those who stay at home. The analogy is faulty. Men are regimented in the armed forces for their own personal protection as well as for their best utilization in the field. In the production of goods, on the other hand, regimentation is not necessary to the safety of the worker, will decrease the volume of production and hence impair the national effort during the defense or war period."

In a forum discussion which brought the Congress to a close, Sargent answered Rhodes' attack on the Taft-Hartley bill by saying that "repeal of that law would mean repeal of the rights of employers. If it were repealed, we merely would fall back on the provisions of the Wagner act."

• **Oliver of CIO Also Hits at Taft-Hartley**—Robert Oliver of Dallas, Texas director of the CIO, was another final session speaker and he, too, attacked the Taft-Hartley law and said that in a time of great unemployment the act could be used to destroy every union in the country. Oliver replaced Everett M. Kassalow of Washington, executive secretary of the CIO Full Employment Committee, on the program.

Other speakers at the final session were W. E. Hamilton of Chicago, economist for the American Farm Bureau Federation; A. F. Leesch of Boerne, master of the Texas State Grange; and Harold A. Young of North Little Rock, Ark., president of the National Cotton Council.

• **Hamilton: No Brannan Plan for Farm Bureau**—"The American Farm Bureau Federation," Hamilton said, "is aggressively opposed to the so-called Brannan Plan which has been presented to the public as a device for assuring high prices to farmers and cheap food to consumers with little cost to anyone. We are convinced that the inevitable controls such a plan would require actually would mean low income per farm family and that the cost of the subsidies it would involve and the inefficiencies it would create would eventually mean a high cost to consumers."

• **Leesch Gives Grange Viewpoint** — Leesch told the Congress that "it is the opinion of the Grange that the end or need of governmental ventures for the common good is nowhere in sight. A changing world will demand them as it has demanded others. However, the Grange firmly believes that government should not do those things through public operation which the average industrious, thrifty citizen can do for himself and should not render services which would enable the shiftless to live off the

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Turkey Builds Stronger Agriculture As a Defensive Weapon

• And helping to do the job through the building of a stronger cotton economy is Agronomist David T. Killough of the Texas Agricultural Experiment Station.

ANKARA, TURKEY

HERE IN far-away Turkey a Texan from College Station is playing a leading role in shoring up economic defenses of the non-Soviet world against mounting pressure from Communist Russia.

He is David T. Killough on leave from his job in Texas as a research agronomist to work here with the Marshall Plan mission. In Turkey, the Russian threat is something you live with during the work-a-day routine. The business of helping to improve the country's agriculture and to strengthen its economy generally is a part of the job of "containing" Russian expansionist aims along the whole length of the iron curtain.

Nobody here is unaware of the daily threat of a "Korean" stab along Turkey's borders, beyond which the Russian bear is watchfully waiting.

The latest economic battle to be fought and won in Turkey, with the help of the Marshall Plan and Texas' Killough, involves cotton. A victorious two-week attack on green worms, the cotton destroyer, has just been successfully completed in the Cukurova, Turkey's rich southern coastal region.

The weapons used included local manpower, DDT and dusters, Turkish determination to do the job, and Killough's know-how.

Recently the green worms began to appear on the cotton leaves. Local land owners went to work on it, asked the Ministry of Agriculture for help. In the final sweep 500 people, including drivers, maintenance and supply crews and field inspectors, kept 114 tractor-mounted dusting machines rolling. Both men and machines were equally divided among the private landowners and Government employees.

● Turkish natives picking cotton. Note the small baskets.

"They start dusting at midnight and go on until eight in the morning," Killough said.

"It's a weird sight—tractors rolling along under the natural light of a big, round, full moon and through the artificial light of the big lamps on the front and back of the tractors. But you can hardly see them. The dust fogs the whole field. Night is the best time for dusting because then the air is relatively still, and the dew on the leaves catches the dust and holds it."

The ground dusting machines are hoppers about two feet square, mounted at the rear of the tractor. A fan forces the DDT dust into pipes two inches in diameter bent earthward like the legs of an octopede (the pipes dust eight rows simultaneously). Then the dust is forced out and fogged onto and around and through the cotton leaves.

• **Is the fight won?**—"I think so," Killough said. "And a good thing, too. I've seen green worm (the common bollworm) wipe out a third of a crop in West Texas. You have to catch them before they go in the cotton boll. Nothing much can help once they get in there.

"But Nihat Bey, the Agriculture Minister, knows that. He and the other officials in the ministry say they like the newer methods of controlling insects. With the enthusiasm they have they'll get the short cuts quickly. The results in this dusting attack show they mean it."

Though a few cotton fields were lost to the pests, control is effective in the great majority of the area. Last year Cukurova produced 300,000 bales of Acala cotton, three-fifths of Turkey's output. This year's crop is expected to be near the 500,000-bale mark.

"Nihat Bey should get the credit for this job," said Killough. "He got the agriculture officials out from behind their desks. He was the first one out himself, and he knew just what to do. Pest control has been a large part of his experience."

● Below is shown a typical Turkish "ginning center." Seed cotton is stored in bags and ginned later.

Cotton's Role in War

(Continued from Page 43)

government at the expense of the provident, industrious citizen."

In referring to the cotton industry's efforts to solve its own problems, Leesch stated it as his firm belief that "the National Cotton Council could justly claim the credit for promoting most of the advances all the way up and down the line. From improved varieties, cultivation, harvesting and processing to the final conclusion of the sale of the finished product, cotton has been well served. I am sure the Grange would support me in this tribute directed to all cotton interest organizations."

• **Council's Young Calls for Free Economy**—Harold A. Young, the final Congress speaker, said that the Cotton Council, which represents all segments of the cotton industry from farmer through spinner, holds firmly to the ideal of a free economy powered by the profit incentive.

"This ideal is impossible of full achievement," Young said, "yet by keeping our eyes on it and approaching it as nearly as we could in generations past, we have converted a wilderness into the richest and most powerful nation that the world has ever seen."

"Our country is being carried toward socialism and toward the end of all our freedom on a current that is sinister and powerful and dangerous," Young declared. "That current is the power that politicians have discovered for making people see the benefits of government more clearly than they see the costs."

The costs of government are to be measured in terms of money and of freedom, Young declared. He cited the ever-increasing tax burden as the prime example of the cost in money but added that the heavier cost is that of lost freedom.

"The further we drift into the direction of the 'welfare state,' the greater is the danger that the state will become our master. The executive branch of our federal government has now become so huge in personnel and in financial power, that its ability to crack the whip over the voting public is already far too great. Yet the economic issues are so complex that it is hard to sense the danger, and easy to fall behind the banners of the social planners and political opportunists who have learned to twist good words like 'welfare' and 'liberalism' into their own service.

"Never before has our nation stood in greater need of true liberalism," the Council president concluded. "We must face the facts, with all their complexity, and deal with those facts like intelligent, free people. We must hold before us the ideal of a free economy with its proven power to build an ever greater nation. Let us take freedom as our guiding star, and following it, reach our destiny."

Beef Makes a Comeback

The nation's beef industry is growing. Back in 1938 there were about 65 million head of beef cattle in the country. In 1945, the total reached a record 86 million. Then there was a drop. But now the U.S. total is back up to about 80 million. At the end of this year it is expected to be about 83 million.

CALENDAR

Conventions • Meetings • Events

• Aug. 28-29-30—American Soybean Association annual convention. Springfield Armory, Springfield, Ill. George M. Strayer, Hudson, Iowa, secretary-treasurer.

• Sept. 11-12-13—Spinner-Breeder Conference and Southern Combed Yarn Spinners Association joint meeting. El Paso, Texas. For additional information, write Delta Council, Stoneville, Miss., sponsor of the Conference.

• September 18-19-20 — Second International Sesame Conference. Maracay, Venezuela.

• Sept. 26-27-28—Annual fall meeting, American Oil Chemists' Society. Sir Francis Drake Hotel, San Francisco, Calif. H. L. Roschen, Swift & Co., Union Stock Yards, Chicago 9, Ill., secretary.

• Sept. 27-28-29-30—Third annual National Soybean Festival, Portageville, Mo. For further information write Joseph A. Delta Council, Stoneville, Miss., sponsor of the Conference.

• Oct. 5-6-7 — Pima Festival. Pecos, Texas. For information write the Chamber of Commerce, Pecos, Texas.

• January 22-23-24, 1951—National Cotton Council annual meeting. Hotel Buena Vista, Biloxi, Miss. Wm. Rhea Blake, P. O. Box 18, Memphis 1, Tenn., executive vice-president-secretary.

• May 14-15-16, 1951—Fifty-fifth Annual Convention, National Cottonseed Products Association. Palm Beach Biltmore Hotel, Palm Beach, Fla. S. M. Harmon, Sterick Bldg., Memphis, Tenn., secretary-treasurer.

Dr. Schaub Is Honored

DR. I. O. SCHAUB, director of the North Carolina Extension Service who is affectionately known to thousands of warm friends as "Dean," was honored by farmers and farm women from all over the state this week during this year's Farm and Home Week, held July 31-Aug. 3. The program was dedicated to Dr. Schaub and a campaign is under way to raise a scholarship fund in his name. He has been director of the Extension Service in North Carolina since 1924 and plans to retire this fall.

USDA Develops Seed Loader

USDA announces a portable pneumatic cottonseed loader designed by Gerald N. Franks of the U.S. Cotton Ginning Laboratory staff at Stoneville, Miss., in connection with investigations under the Research and Marketing Act of 1946. The unit is mounted on wheels and equipped with an electric extension cord so it can be readily moved about the buildings for transferring seed quickly from truck to storage, or from bin to truck. Under test, cottonseed has been successfully handled with the device at the rate of five tons an hour, USDA reports.